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CALCUTTA UNIVERSITY**

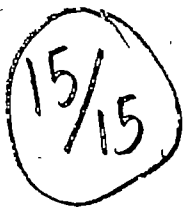
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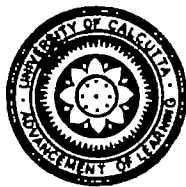
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Edited By

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The Board of Editors of the *Journal of Ancient Indian History* sincerely regrets to its readers for the inordinate delay in the publication of its present volume. Necessary steps are being taken to publish the journal annually from now onward to meet the consisting demand of its readers in the country and abroad. The Board of Editors cordially invites contribution of papers from the scholars working in the different fields of Indology for its forthcoming issue.

HARIKELA'S CONTACTS WITH OUTSIDE WORLD

ADHIR CHAKRAVARTI

I

For an understanding of Harikela's contact with the outside world in its proper perspective it is necessary at the outset to determine the scope and nature of such a study. First, a precise denotation of the expression 'outside world' in relation to Harikela has to be found out. Should we understand by it only the countries lying outside the geographical limits of the Indian subcontinent? Or, will it be more logical to understand the term to comprise all countries and regions not included within Harikela at the time of its maximum expansion? Secondly, it has to be decided whether only cultural or all sorts of contacts, political, economic, social and cultural, will be undertaken. To be comprehensive in a study like the present one 'outside world' should include both Indian and extra-Indian countries and regions which never formed part of Harikela and all sorts of contacts of Harikela with those countries should come within its purview.

But for reasons of space and concern to avoid repetitions and controversies, political relations of the region with other states will be generally omitted by us.

There has been much discussion on the original territory and extent of Harikela. But doubts and confusions still persist. A resume of the controversy may be useful to determine the scope of the present study. According to Dr. D.C. Sircar¹ "Harikeli or Harikela was originally the name of Srihatta (mod. Sylhet) region but the name was later applied in a

NOTE: This is an article of Professor Adhir Chakravarti who died in harness as the Principal, Bidhannagar College, Calcutta on December 20, 1993. A leading specialist in the history of early South-East Asia and ancient Indian socio-economic and political institutions, Professor Chakravarti was a post-graduate student of this Department. Results of his significant researches on early South-East Asia, which he made under the supervision of the celebrated French historian G. Coedes in Paris, were regularly published in the JAIH. Author of two books on ancient Cambodia, he also edited Documents on the History of Calcutta (on the occasion of the Tercentenary Celebration of the city) and the Meerut Conspiracy Case. Professor Chakravarti will be long remembered as an excellent teacher who taught, among other institutions, at Sanskrit College, Calcutta, Jhargram Raj College, Jhargram (both as a Professor and the Principal) and Bidhannagar College (as the Principal). He was also the Deputy Director, Public Instructions and Director of Archives, Government of West Bengal (from 1982 to 1992). This article is being posthumously published with the cooperation of Dr. Apala Chakravarti, his bereaved wife. — Editor.

wider sense to Vanga² apparently as a result of the expansion of a kingdom that had its headquarters in the Sylhet area". This view has been upheld by Dr. R.C. Majumdar³ and by Dr. Abdul Momin Chaudhury⁴. On the other hand, Dr. B.N. Mukherji holds that in the second (also possibly in the first) half of the seventh century A.D. Harikela, which formed the eastern boundary of the Indian subcontinent and was situated on the sea, should be placed to the east or south-east of the Comilla and Noakhali districts. The territory which obviously selects itself is the coastal region of the Chittagong district⁵. He continues: "As the Candras expanded their sphere of influence and rule from their base in Harikela, the name Harikela perhaps became associated with the region of Vanga etc. Harikela might have incorporated the Sylhet area by the time of Sricandra"⁶. The following discussion based in a chronological arrangement of the sources referring to Harikela may be useful in solving the problem of original territory and ultimate expansion of Harikela.

i) The Chinese pilgrim Wu-king whom I-Tsing met six *Yojanas* off Nalanda in the first year of Ch'ui-King period (= A.D. 685) and who sailed north-east from Ceylon came to Harikela 'which is the eastern limit of Eastern India [tung T'ian(-chu)] and of Jambudvipa (Chan-pu-Chou)⁷. Since it was a point of disembarkation, Harikela must have been a littoral area'.

ii) During the latter half of the 7th century A.D. Seng-Chi came by the southern sea-route and arrived at Samatata where Hoh-lo-she-po-t'a had been ruling⁸. According to Hiuen Tsang San-mo-to-t'a was on the sea-side, but from Kamarupa he traversed 1200/1300 li to reach San-mo-to-t'a which shows that Samatata included also some inland areas.

iii) In Hui-lin's *Glossary* (completed in A.D. 817)⁹ Ho-lai-Kai-lo is placed in between Samatata and Tamralipti and all these are stated to have been situated near Kamarupa¹⁰.

iv) The map entitled Map of Central Asia and India published in Japan in A.D. 1710 on the basis of the accounts of Fa-hsien and Hiuen Tsang and reproduced at the end of Volume II of the French translation of Hiuen Tsang's Records by St. Julian shows Harikela as comprising the coastal region between Samatata and Orissa.

v) The Chittagong Copper Plate inscription of Kantideva (9th Century A.D.) issued from Vardhamanapura contains an exhortation to the future rulers of Harikela-mandala. Dr. R.C. Majumdar thinks that since no other city else than Burdwan was known as Vardhamanapura; Kantideva had his capital at Burdwan¹¹.

vi) The Candra King Tfrailokyacandra whose dominion included both Candradvipa (mod. Bakharganj district) and Samatata "was the support

of the Fortune goddesses (of other kings) smiling at (i.e. joyful on account of) the umbrella which was the royal insignia of the king of Harikela"¹².

vii) The Pascimbhag Copper Plate Inscription of the year 5 of Sri Candra¹³ is a clear evidence of this king's authority extending to Srihatta region. Verse 6 of the Mainamati Copper Plate inscription No.1 of Ladahacandra¹⁴, son of Sri Candra is indicative of the Candra king' held over Pragjyotisa-Kamarupa (Upper Assam).

viii) In the *Vaijayanti* of Yadava prakasa (11th century A.D.) and in the *Abhidhana-Cintamani* of Hemacandra (A.D. 1088-1172) Harikela and Vanga have been identified.

ix) The *Dakarnava* mentions Harikela, Radha, Vangala etc. as regions of Sakta-Pithas.

From the above resume it will be seen that Harikela consisted of Noakhali, Comilla, parts of Tippera and Chittagong districts but did not include Srihatta-Sylhet region before the time of Sri Candra. After the decline of the Candra rulers there met in apparently a period of political instability in the region which is perhaps indicated by the multiple authorship and locales of issue of the second series of Harikela coins. Finally, with the establishment of Muslim rule in Bengal early in the 13th Century A.D. Harikela ceased to exist as a politico-geographical expression¹⁵, though the name was not wholly obliterated. It is referred to as Harikeli in Kesava's *Kalpadrakesa* (A.D.1660), Harikela in *Rupacintamanikosa* (Dacca University Library Manuscript No.1461, d. 1515 S'. = A.D. 1593) and *Rudrasa* (Dacca University Library Manuscript No.21415) and Harikela in *Krityasara*. All these refer to exclusively to Srihattadesa¹⁶. The standpoint of Dr. B.N. Mukherji thus stands vindicated. However, it is difficult to agree with him when he proposes a very restricted denotation of the expression 'Harikela' in the West: "The name Vanga or Vangala could have been extended to Samatata, Srihatta etc. to the east of Meghna. But there is no evidence of extension of the name Harikela to Vanga proper (a Vanga-Vangala region) to the west of the river (Meghna)"¹⁷. Dr. Mukherji is, of course, not unaware of the fact that certain texts identify Vanga with Harikela but he explains such identification as due to the association of extended Vanga by the Candras who had assumed power initially in original Harikela¹⁸. The argument is self-defeating. As a matter of fact in the 11th-12th centuries A.D. the *Vaijayanti* of Jadavaprakasa and the *Abhidhana-cintamani* of Hemacandra clearly equate Harikela with Vanga. The latter text has *Vangastu harikelivah*¹⁹ i.e. "the Vanga people have been Harikelized". In other words, Harikela came to supplant Vanga as a politico-geographical expression at least in the 11th-12th centuries A.D. That such might have been the case even earlier may be surmised from

the Chittagong Copper Plate inscription of Kantideva which palaeographically has been assigned to the 9th century A.D. The inscription refers itself to the future rulers of Harikela-mandala²⁰ and was issued from the victorious camp at Vardhamanapura. If, as Dr. Majumdar thinks, this Vardhamanapura refers to Burdwan and further, if Harikela mandala stands for the entire dominion of Kantideva and not just a division or part of it called Harikela, it would follow that Harikela-mandala comprised Vardhamanapura-Burdwan on the one hand and Chittagong, the findspot of the inscription on the other.

The Chinese sources bring forth further evidence of Harikela being applied as a geographical expression to include tracts lying much further west of the Meghna. Thus early in the 9th century Hui-lin's *Glossary* locates Harikela between Samatata (Comilla and Noakhali districts) and Tamralipti (Tamluk in Midnapur district). Again, the map entitled *Map of Central Asia and India* published in Japan in A.D. 1710 on the basis of accounts of Fa-hsien and Hiuen Tsang and re-produced at the end of Vol. II of the French translation of Hiuen Tsang's *Records of the Western World* by St. Julien, shows Harikela as comprising the coastal region between Samatata and Orissa.

Finally, Dr. A. Karim²¹ has shown that the Meghna did not possibly exist in its present form in A.D. 1550 when de Barros prepared his map. A century later in A.D. 1660 in the map prepared by Van den Brouck the Meghna is separated from Chittagong by a large mass of land which is enclosed in the north-east by a branch of the Brahmaputra itself parting at Sonargaon. It is only in the map of Major Rennell prepared in A.D. 1789 that the Meghna has assumed its present form of a mighty river and the sea has receded giving rise to the land-mass known nowadays as the Noakhali district. If during the period of our study the Meghna was either non-existent or did not flow in its present course, it is pointless to hold that the application Harikela did not prevail in regions lying west of this river.

From the foregoing discussion it seems to transpire that we shall not be far wrong if we take the expressions Harikela, Samatata and Vanga which were mutually inclusive at one time or other as forming one compact geographical region which comprised the whole of modern South and South-East Bengal. Consequently for the purpose of the present investigation all countries beyond this region formed the outside world. With the horizon of the outside world so determined, the scope of Harikela's contact with it will be much wider, more constant and more far-reaching.

II

The low-lying marshy and fluvial character of South and South-East Bengal is well attested in inscriptions²². It is therefore well conceivable

that contact with the outside world was maintained essentially through waterways. Indeed inscriptions contain references to riverways (*nau-Khata* or *Nauyoga-Khata*)²³, boat-way in a canal covered with moss (*naudamda. nau-prthvi, nausthirayaga*)²⁴ and possibly even to ship-building harbours (*navata-ksen*)²⁵. The brisk activities of hundreds of boats and sailors in the port-town of Devaparvata situated on the bank of the Ksiroda have been described in the Kailan C.P. of Sridharanarata and in the Pascimbhag C.P. of the year 5 of Sri Candra²⁶. The Bhattara Grant of Govindakesava specifically mentions a sailor named Dyojya²⁷. But in spite of all these mentions in inscriptions and literary texts, both indigenous and foreign, we get only glimpses of the river and road routes, though in respect of overseas routes linking Harikela-Samatata-Vanga with the outside world greater details are available. However, an effort may be made to reconstruct the road, river and road-cum-river routes from the informations at our disposal.

i) *The Samatata-Kamarupa route* : In the seventh century A.D. Hiuen Tsang travelled along this route. According to the *Records*, from Kamarupa i.e. Upper Assam he proceeded towards South and after a journey of 1200 or 1300 li reached the country of San-mo-to-t'a (= Samatata) which was on the sea-side and was low and moist²⁸. From the account of Hiuen Tsang it is not clear whether he crossed any river on the way, though as at present a journey from Upper Assam to Noakhali and Comilla would entail crossing of two mighty rivers viz. the Lauhitya/Lohit/Brahmaputra and the Meghna. In the 10th and 11th centuries the Candra rulers of Harikela-Samatata-Vanga were engaged in a series of expeditions against Kamarupa²⁹. But details of the route or routes followed are not given. Thus Sri Candra is stated to have conquered Kamarupa and his soldiers roamed along the forests rendered beautiful by the black *gharu* wood on the bank of the Lauhitya, (= Brahmaputra) but it is not stated whether they came by boat along the Lauhitya³⁰. The first categorical mention of the use of the riverway for transport of goods comes from the accounts left by Arab geographers and historians. Ibn Khurdadbah (died 300 A.H. = A.D.912), the Director of Ports and Police in Media wrote in connexion with Samandar that aloe-wood from Qamrun and other places was imported here from a distance of 15 or 20 days' journey.³¹ As will be seen below, Samandar corresponds to modern Chittagong or a port not far from it. Qamrun is evidently a deformation of Kamarupa. This information is further elaborated by al-Idrisi who writes as follows : "Aloe wood is brought hither from the country of Kamrut (= Kamarupa) 15 days' distance by a river of which the waters are sweet. The aloe-wood which comes from this country is of superior quality and of a delicious perfume. It grows in the mountains of Karan"³² In the name Kamrut and its association with aloe-wood, Kamarupa is very easily discernible and the sweet-water river along which

aloe-wood was transported is clearly the Brahmaputra, the only navigable river from Kamarupa.³³

ii) *The Harikela-Arakan overland route* : The existence of a Candra ruling dynasty in Arakan from the 4th century to the 9th century with a possible interregnum in the 6th century A.D., the similarity of coin-types of those Candra kings with those issued by the Candra rulers of Harikela, certain architectural remains and literary and epigraphic evidences point to a close and continuous relation existing between the two states. From the accounts of the Arab geographers and historians we know of the maritime route connecting Arakan with Suman. There is also a well-known route passing through Maungdaw on the Neaf river in Arakan which along the coast of the Bay of Bengal ends up to Cox's Bazar in the Chittagong district. This road which may be called the Arakan-Chittagong route at present connects Burma with Bangladesh. There is reason to believe that during the period of our study as well the route was equally traversed by kings and soliders, pilgrims and merchants. An extension of this road along Arakan led to Lower Burma and stretched as far as what Hiuen Tsang calls Shib-li-she-ta-lo (= Sriksetra, modern Prome), though the physical barrier of lofty mountains and rivers stood in the way of a closer contact.³⁴

iii) *The Tripura-Manipur-Pagan route* : *Burmese Glass Palace Chronicle* and epigraphic and numismatic evidences show that a close relation existed between Pattikera (the successor state of Harikela?) and the rulers of Pagan. From the mention of a war between the two, it is evident that the maritime route was in use. As for the land route connecting Lalmai-Mainamati region of Pattikera with Pagan, it seemed to pass through the Surma and Cachar valleys (i.e. mod. Sylhet-Silchar area) and thence along the Lushai Hills passed through Manipur and reached Upper Burma and then descended to Pagan in the Central Burma.

To what extent Harikela maintained overland contact with countries lying beyond Burma cannot be ascertained. In the seventh century A.D. from Samatata Hiuen Tsang³⁵ observed as follows : "Going north-east from this (Samatata) to the borders of the ocean we come to the kingdom of Sriksetra (Shi-li-ch'a-ta-lo).³⁶ Further on to the south-east on the borders of the ocean we come to the country of Kamalanka (Kim-jo-lang-Kia). Still to the east is the kingdom of Dvaravati (To-lo-po-ti). Still to the east is the country of Is'anapura (I-Shang-na-pu-la); capital of undivided Tchen-la (Kambuja). To the east of this is Mo-ho-chan-po, the Lin-yi of the Chinese and to the south-west of this is Yen-no-na-chou. This six countries are so hemmed in by mountains and rivers that they are inaccessible.³⁷ The position must have improved in the course of the next one hundred and fifty years since Chia-Tan (A.D. 785-805) gives an account of a journey

from Ten-Kin to Kamarupa and from the latter to Pundravardhana.³⁸

iv) *Harikela-Kamarupa-Tibet route* : The Pascimbhag C.P. of the year 5 of Sricandra informs us that after subjugating Kamarupa, the soliders of Sri Candra moved in a region beyhond the green *gharu*-forests on the bank of the Lauhitya and where the Yaka ruminated leisurely and drowsily³⁹ i.e. the sun-snow-clad Tibetan region. This same route might have been followed a few centuries later by the first Muslim invader of Bengal and Assam, viz Bakhtiyar Khalji who is credited also with an expedition to Tibet by Minhaj.⁴⁰

Indeed the account of Minhaj is partly corroborated by an inscription found at Kanai-Barshiboya near Gauhati on the Brahmaputra and dated in 1427 Saka i.e. A.D. 1206 which refers to the destruction of the Turuskas who came to Kamarupa.⁴¹ In view of the date of the inscription, this can refer only to the expedition of Bakhtiyar Khalhji. For the present study the point of interest is that the Harikela-Kamarupa-Tibet route alluded to in the Pascimbhag C.P. inscription of yr 5 of Sri Candra remained functional at least till the beginning of the 13th century A.D. The route to Tibet described above must have been seen different from what was followed by Santiraksita and Srijnana Atisa-Dipankara. Both of them started from Vikramasila-Vihara and reached Tibet via Nepal.

v) *Harikela-Uttarapatha route* : Rohitagiri, the place of origin of the Candras,⁴² has been generally identified with Rohtasgarh in South Bihar. It is sometimes believed that the Candras came to East Bengal in the bandwagon of the Pala invasion.⁴³ Dr. R.C. Majumdar has rightly pointed out that Rohtasgarh corresponds to Rohitasvagiri and not to Rohitagiri.⁴⁴ N.K. Bhattasali suggests that in view of impressive remains of the Candras unearthed in the region of Lalmai Hill (Comilla District), Rohitagiri may be identified with Lalmai.⁴⁵ Dr. Sircar has since shown that according to information supplied by the Pascimbhag C.P. inscription of the year 5 of Sri Candra Lalambi should better be taken as the ancient name of Lalmai.⁴⁶ Ancient Rohitagiri may be identified with Rangamati in Chittagong Hill Tracts as originally suggested by Haridas Mitra.⁴⁷ Starting from this remote corner in the easternmost part of the country, some Candra rulers are stated to have accomplished *digvijaya* both in the north and in the south. Thus in the course of his conquest of Uttarapatha Sri Candra is credited to have reduced the Hunas and Yavanas.⁴⁸ Again, his grandson Ladahacandra is known to have gone on pilgrimage to Varanasi and Prayaga-Allahabad and performed at both these places purificatory and religious rites and acts of piety.⁴⁹ If the kings of Harikela-Samatata-Vanga carried on political aggrandisements in North and North-West India, kings of these regions also made conquering expeditions against Vanga-Harikela.

To give a few examples, Gurjara-Pratihara king Bhoja I has been described as Vangapati in his Gwalior Prasasti.⁵⁰ Rajasekhara in his *Karupura-manjari* credits Candapala - and this is a thinly veiled pseudonym of his patron, the Gurjara-Pratihara king Mahendrapala (C.D. 890-910) to have amorous dalliances with the women of Harikela.⁵¹

vi) *Harikela-U.Deccan route* : The Western Calukya king Somesvara I (A.D. 1042-1058) claims to have conquered Vanga⁵² while Vikramaditya V (A.D. 1076-1126) is stated to have terrified the kings of Gauda and Vanga.⁵³ The Kalachuri king Lakshmanaraja, son and successor of Yuvaraja has been described as proficient in breaking the Vangalas (*Vangala-bhang-nipuna*).⁵⁴ These and many other references to political and military encounters between Harikela-Vanga and North India and the Deccan are indicative of great spatial mobility of people in both directions. Though our sources do not elaborate on the routes actually followed for such contacts, it will be perfectly justified to assume that besides transport along the Ganges and its tributaries, the traditional trunk road, connecting Lower Bengal with as far North and North-West as Taksasila and Purusapura (Peshwar) and the port-cities of the Western Coast were followed.

vii) *Harikela-Eastern Deccan-South India route* : Early in our period Hiuen Tsang travelled from Samatata to Tamralipti. He also visited Odra, Kongoda, Kalinga, Southern Kosala, Andhra, the Dravida country, and the Cola country in the South. From his itinerary, however, it is not possible to reconstruct the routes followed by him in any detail. But the fact remains that he visited Kanci, which proves the existence of roads connecting South East Bengal with South India. In the course of his victorious expedition to the South Candra king Trailokyacandra is stated to have traversed the Vindhya mountain, the source of the Kabveri river.⁵⁵ Military expeditions in the reverse directions also took place. Thus, for example, the Tirumali inscription (dated c. A.D. 1024-1025) of Rajendra Cola mentions the countries successively conquered by him as far as Vangala-desa which was adjacent to Takkana-lala and Uttira-lala, Govinda Candra, undoubtedly the son and successor of Ladahacandra, was worsted in the encounter and fled.⁵⁶ Again Kalacuri king Karna is stated to have overwhelmed a king of the eastern country who seen from the date of the Rewa inscription (A.D. 1048-49) might seem to have been no other than the hapless Govindacandra himself or his immediate successor.⁵⁷ It has been surmised that Karna followed the route traversed earlier by Rajendra Cola and invaded S.E. Bengal from Orissa. Apart from such political military enterprises, there are evidences of large scale race-movements of a more peaceful and durable nature. The Yadava Varmans and the Sena rulers of Bengal are known to have come from the Karnata region. During the reign of Candra king Sri Candra there was a colony

of *desantariyas* i.e. settlers from outside, in a remote corner of Srihatta-mandala (sylhet) for whom four *mathas* were separately constructed by Sri Candra.⁵⁸ From the list of allottees of land granted, there is reason to believe that these outsiders came from the Far South. All these go to prove that there were well established trunk and ancillary roads connecting S.E. Bengal with the Far South and the Malabar coast.

III

Our knowledge of the maritime contacts of Harikela-Samatata-Vanga is also far from complete. One negative point may be discussed at the outset. Within a century or a little more from the beginning of our period Tamralipti, the most famous port-town of ancient Bengal ceased to exist as such.⁵⁹ The Dudhpani Rock inscription (Hazaribagh District, 8th century A.D.) of Udayamana refers to three merchant brothers from Ayodhya as having made a fortune [*Kasmin G1 cit samaye vanijo bhrataramstrave tamralipti(na) yodhyayamayuh*].⁶⁰ Dr. Ray has pointed out that the use of the indefinite *Kasmin* indicates that at the time of the redaction of the inscription the story of the three brothers returning from Tamralipti was a story of the past.⁶¹ Indeed in A.D. 817 Hiuen-tsin mentions Tamralipti not as a port-town but as a geographical region like Samatata.⁶² Dr. Ray agrees with the archaeologists who believe that the remains unearthed at Chandraketurgh situated on the dried up bed of the Vidyadhari, a channel of the Ganges in 24 Parganas, West Bengal mark the site of the port-city of Ganges mentioned in the *Periplus* (c. 3rd quarter of the 1st century A.D.) as situated in the Ganges.⁶³ Ptolemy (c. A.D. 150) describes it as the royal city (1460, 19015') of the Gangaridai but does not say anything as to its situation on the Ganges.⁶⁴ Dr. Ray thinks that "as port-cities Tamralipta and Gange were co-oval and co-terminuous, fading out of history in the sixth-seventh century A.D."⁶⁵

After the decline of Tamralipti and Chandraketurgh-Gange Dr. Ray thinks that there flourished no other sea-port in Bengal till the rise of Satgaon in the 15th century A.D.⁶⁶ Dr. Ray is, however, aware of the fact that the *Milinda-Panho* refers to a sea-port in Vanga but he is not sure as to where to locate it, on the Budiganga which he takes to be identical with Antibolo of Ptolemy or on the Meghna, or to identify it with modern Chittagong or the medieval port of Bangala.⁶⁷ From this port of Vanga merchant-sailors used to charter the high seas and go to Takkola⁶⁸ and Cina (i.e. China) in the East, and Suvannabhumi to Kolapattana (= Colapattana = Kaveripattinam/Puhar?) in the South and Sovira (= Sauvira), Suratto (Surastra) and Alasanda (Alexandria) in the region and during the period under study can be well established. Thus, in the latter half of the 7th century A.D. the Chinese pilgrim Seng-chi arrived

in Samatata from China 'by the southern sea-route'.⁷⁰ Since Samatata, as described by Hiuen Tsang, was a seaside country, it is likely that Seng-chi disembarked at a port in Samatata. In I-tsing's *Memoirs of Eminent Monks from China and Bordering Countries visiting India in Search of Truth* (A.D. 671-696) there are references to two pilgrims who came to Harikela. One of them Tan-Kwong, a Buddhist monk of China, came to India by the southern sea-route. He repaired to Ho-lai-kai-lo (= Harikela) where he was received by the king of that country. He got a temple built there, procured books and Buddhist images and ultimately passed away there.⁷¹ It cannot be ascertained as to whether the port in Samatata visited by Seng-chi was identical with the Harikela port where Wu-hing definitely and Tan-Keong possibly disembarked. But one thing is certain: Tamralipti, the port where I-tsing disembarked in A.D. 673⁷³ had nothing to do in respect of the voyages of Seng-chi, Tan Kwong and Wu-hing.

Some two centuries later i.e. long after the decline of Tamralipti as a sea-port Ibn Khurdadhbih, the Director of Ports and Police in Media (A.D. 844-48) in his *Kitab al-masalik Wa'l-mamalik* (Book of the roads and kingdoms) gives a rather complete description of a place called Samandar which was about ten *prasanga* distant from Kan(l)a.⁷⁴ Rice was produced here and aloes-wood from Qamrun and other places was imported here from a distance of 15 or 20 days' journey. According to al-Idrisi, "Samandar is a large town, commercial and rich, where there are good profits to be made It stands upon a river ⁷⁵ which comes from the country of Kashmir. Rice and various grains, especially excellent wheat, are to be obtained here. Aloes-wood is brought hither from the country of Karmut (Kamarupa) 15 days' distance by a river of which the waters are sweet ... One day's sail from this city there is a large island well peopled and frequented by merchants of all countries. It is four days' distance from the island of Sarandib (Ceylon). To the north at seven days' distance from Samandar is the city of Kashmir the inner."⁷⁶ Though the distances and directions as also some other details of the accounts given by these writers cannot be relied upon, two elements may be noted for the identification of Samandar. First, the sweet water river along which aloes-wood was carried to Samandar from Karmut could only refer to the Brahmaputra, the only navigable river in Upper Assam. Secondly, at one day's distance from here there was a large island. Dr. Dani thinks that "both these points can be satisfied if we assume that the port town was somewhere in the Bengal coast, more probably at the mouth of the Meghna. Not far from this mouth is a large island called Sondwip. "⁷⁷ Dr. A.K. Karim broadly accepts the conclusions arrived at by Dr. Dani but points out that the latter is not justified in seeking to explain historico-geographical reality of the 9th/10th centuries A.D. of Lower Bengal with reference to modern atlases.⁷⁸ As a matter of fact, the Meghna, at least

in its present form, did not exist at the time. In the matter of identification of Samandar Dr. Karim⁷⁹ follows N.K. Bhattasali. Dr. Bhattasali draws our attention to the account of the port-town of Ganges as given in the *Periplus*: "on its bank is a market town which has the same name as the river Ganges. Through this place are brought malabathrum and Gangetic spikenard and pearls, and muslins of the finest sorts, which are called Gangetic. It is said that there are gold-mines near these places and there is a gold-coin which is called *Caltis*. And just opposite this river there is an island in the ocean, the last part of the inhabited world towards the east, made under the rising sun itself, it is called Chryso and it has the best tortoise-shell of all the places on the Erythraean Sea."⁸⁰ According to Ptolemy, there were five branches of the Ganges, Kambuson and Antibela being respectively the westernmost and easternmost. These are identified by Bhattasali respectively with the Bhagirathi and the Sondwip channel flowing between Sondwip and the Chittagong coast. He also believes that the easternmost branch was the principal course of the Ganges in the days of Ptolemy. He locates Tamralipti on the Kambuson-Bhagirathi and Ganges on the Antibola. Here again are present the same two salient points in the location of Ganges, as were found in the case of Samandar viz. location on a river and presence of an island opposite to it. There is thus a very strong case for the presumption that Ganges of the *Periplus* and Samandar of the Arab geographers were identical.⁸¹ In the thirteenth century A.D. Ibn Battuta sailing in a junk from Sundarban (Sonargaon in Dacca district) reaches Java in 40 days. He gives the following description: "The first town of Bengal which we entered was Sundarwan; it was a great city, situated on the shore of the vast ocean. The river Ganges to which the Hindus go on pilgrimage and the river Jun (i.e. Jumna, which must be a mistake for the Brahmaputra) have united with it before falling into the sea."⁸² The name Sudakawon stands for Chittagong (and not Satgaon which did not exist before the 15th century A.D.) and it is important to note that the river has been called Ganga. So in a way Chittagong might have been called the port of Ganga. Indeed the name Chittagong had been supposed to be derived from Arabic Shat i.e. delta thereby meaning end or extremity) and Ganga. The name thus would mean 'city on the mouth of the Ganges'.⁸³ It will thus be seen that here we have further corroboration of Bhattasali's contention that the easternmost branch of the Ganges was its principal course and was actually called the Ganga. It may further be added that Dr. P.C. Bagchi thinks that the pronunciation of the port-town written as Huang-chih where two embassies from China supposedly came, the first during the reign of Emperor Wu-ti (141-87 B.C.) and the second during the period of Emperor Ping Ti (A.D. 1-5) by Wang Mang,⁸⁴ was actually *rwang-Asiae (g'lie)* and this represented *Ganga*.⁸⁵ It will then be only fair to assume

that this Ganga port and Ganges of the *Periplus* and Ptolemy were all identical. Indeed there are at least two more references to this port on the Ganges in Chinese sources. The first concerns the mission of Su-wu about the middle of the 3rd century A.D. The *Lieng-shu* states that Su-Wu embarked from the port of Chu-li and "followed the sea into a large bay. Directly to the north-west he entered and passed through the bay, on the shore of which were several kingdoms. In rather more than a year he reached the mouth of the River of India and then sailing upstream in a few months reached the capital of the Miuen Louen."⁸⁶ The *Shui Ching-shu* quoting from Kang-T'ai's *Pu-nan T'u-su-chuan* furnishes the further detail that the river of India was called Heng-shui⁸⁷ which, however can hardly be supposed to be another transcription of Ganga.⁸⁷ The *Liang-shu* again mentions Ti-Tchien, the son of Fan Hou-ta of Champa and states that he abdicated the throne in favour of his nephew and came to live in India. In all likelihood it was he who has been called Gangaraja in a Mi-son inscription of the 7th century A.D. The inscription states: "Kingship is difficult to abandon (and he has abandoned it); the sight of the Ganga is a great joy, said he and retreated to the Ganga."⁸⁸ The port on the mouth of the "Ganga where Su-wu and Gangaraja arrived also seem to be identical.

The burden of the foregoing discussion is to refute the assertion of Dr.N.R.Ray that after the decline of the port-town of Tamralipti, no other port developed in Bengal between the 8th and 15th centuries A.D. It has been endeavoured to show that at least as late as the time of Ibn Battuta's visit and possibly even later the eastern branch of the river after its bifurcation near Rajmahal was called more commonly Ganga⁸⁹ and at the mouth of the Ganga there was always a flourishing port, called by the author of the *Periplus* and Ptolemy Ganga/Ganges, by the Chinese sources Hoyang-chih/rwang-tsic (g'jic)/Heng-shui, by the Arab geographers and historians Samandar and Sudkawan. The port in question stood in the vicinity of modern Chittagong. Some details of routes followed for maritime contact may be had from the writings of the Chinese pilgrim I-tsing who made his voyages between A.D. 671 and 696 and from the accounts left by the Arab geographers and historians from the 9th century A.D. onward. I-tsing himself landed at Tamralipti, and not in a port in South or South-East Bengal but as has already been seen his compatriots Tar Kwong and Song-chi arrived respectively in Harikela and Samatata. These latter are stated to have come by 'the southern route'⁹⁰. What does this southern route mean? It cannot surely denote a diversion of the route via Ceylon, since with regard to Wu-hing, I-tsing simply states that following his visit to Ceylon, Wu-hing sailed by ship towards the north-east and after about a month's sail reached Harikela⁹¹ and no-where is the route qualified as 'southern'. This qualification makes sense either

with reference to the route followed by I-tsing himself or if it is same I-tsing, Wu-hing, Tan Kwong and Sung-chi all followed basically the same route to India. The Southern route can only imply the existence to a more northerly route. Let us examine all the alternatives in depth.

After leaving Kwang-tung (Canton) and sailing towards the south before twenty days he reached Sri Vijaya (Palembang) where he stayed for six months. From Sri Vijaya he came to Malayu (Jambi) and thence to Ka-cha (Kic-cha = Kataha = Kedah) Going north from Ka-cha after more than 10 days' sail, he reached the country of the Nakod Pooplo (Nicobar Islands). In about half a month's sail from here in the north-western direction he reached Tamralipti.⁹² Since from Palembang he came to Jambi and then reached Kodah, it is evident that I-tsing passed through the Straits of Malacco. Hence, if the Chinese pilgrims other than I-tsing mentioned above followed a different southern route, this can only point to their sailing across the Sunda Straits. But passing through the Sunda Straits involved difficult sailing across the inhospitable south and south-western coast of Sumatra. Negotiating this route, while not intrinsically impossible, was to say the least, unlikely. The Straits of Malacca - Kedah - Nicobar Islands route then has to be accepted as constituting the southern route. Viewed as such there must have been a northern route. This is precisely the old partly sea partly land route cutting across the Malay Peninsula.

The first definite reference to it is contained in the Ch'ien Hen-Shu giving an account of two embassies sent to Huang -chih as has been referred to earlier :-

"I. From Hsu-won and ho-p'u (which are) frontier ports in Jih-nan, travelling by ship for about five months, there is the kingdom of Tuyuan. Going again by ship for about four months, there is the kingdom of I-lu-mo; going again by ship for over twenty days, there is the kingdom of Shon-Li. Going by land for over ten days, there are the kingdoms of Pu-kan and Tu-lu (or the kingdom of Tu-kan-tu-lu). From the kingdom of Pu-kan and Tu-lu going by ship for over two months, there is the kingdom of Huang-chi. The customs of the people resemble about those of Chu-yai. They have many strange products

"III. In the years between A.D. 1 and 6 Wang Nang, assisting the government desired to manifest a majestic virtue. He sent rich presents to the king of Huang-Chi commanding him to send an embassy to offer in tribute a living rhinoceros.

"IV. From the kingdom of Huan-Chih going by ship for about eight months one arrives at Pi-tsung. Going by ship for about two (or eight) months one arrives at the frontier of Hsiang-lin of Jih-man. So it is said.

"V. To the south of Huang-Chih there is the kingdom of I-cheng-pu. It is from there that the envoys-interpreters of Han returned".⁹³

Identification of the place-named contained in the text quoted above has been the subject of much controversy. Petooh suggests the following identifications: Tu-yuan at the mouth of the Mohong, I-lu-mo in the Gulf of Siam, Sheng-li in the neighbourhood of Rajapuri or Patani; and the twin kingdoms of Fu-Kan and Tu-lu on the opposite shore of the Malay Peninsula.⁹⁴ Wong Gungwu and Wheatley think that the overland journey of ten days from Sheng-li to Fu-Kan-tu-lu (taken as one single name by Wang Gungwu) was across the Malay Peninsula in the region of the Isthmus of Kra.⁹⁵ The fact that it took more than ten days to cover the journey makes it more likely that the route lay at some distance either in the north or in the south of the Isthmus of Kra.⁹⁵ Of the several possible routes, two in the north and one in the south of the Isthmus suggest themselves as confoirming with the implication of the Chinese text. Of the two northern routes, it may be said that in the early centuries of the Christian era merchants from south-eastern coast of India crossed the Bay of Bengal, came to Arakan (Ptolemaic Sade) and the Burmese Deltas. From there they penetrated further interior into peninsular S.E. Asia. From Moulmein along the Ataran river they came upto the Throo Pagodas' Pass (altitude 800') and from there by way of the Moi Sam Kwo Noi they descended easily into Lower Siam in the valley of the Mekong river. The more southerly and longer route ran through Tavoy district and crossed the watershed at the Threo Cedis' Pass the two routes suggested above converged into the composite delta of Lower Siam in the vicinity of the archaeological sites of P'one Tuk and P'ra P'athom which indirectly shows that both the routes as outlined above were actually followed. The route south of the Isthmus corresponded to the present Kedah-Patani route.

The return journey of the Han envoy was effected via P'i-taung. Ferrand locates it somewhere between Palembang and Malacca.⁹⁶ While Wang Gungwu likes to take it as 'an island probably situated somewhere in the Straits'.⁹⁷ Other identifications have also been suggested for P'i-tsung.⁹⁸ While most scholars tend to locate P'i-tsung in the Malay Peninsular region, Wolters thinks that it lay outside Malay Peninsula and could denote an area inhabited by Malay-speaking Oranglaut on the Tonassoriam coast.⁹⁹ In this connexion it is important to note the remarkable phonetic similarity between P'i-tsung and Besunge of the *Mahaniddesa* and Besynga of *Ptolemy* (162', 90). It is thus not impossible that P'i-tsung was located somewhere in South-East Burma and the Chinese envoy on his return journey was obliged to pass the winter here so as to avoid the onslaught of the north-eastern monsoon. This would explain the inordinate delay of eight months taken to reach P'i-tsung from Huang-chih/Ganga.

It is thus likely that on the onward journey the Chinese envoy sailed along the Bay of Bengal from the western coast of Malay Peninsula but on the return journey in the beginning of the Christian era the Han envoy preferred to cruise around the coasts of S.E. Bengal, Arakan and Burma. It thus appear that there is really nothing to warrant the assertion of Wang Gungwu that though the overland trip of ten days across the coast of Malay Peninsula was more attractive than a long voyage down the east coast of the Malay Peninsula and then up the straits of Malacca, the Straits routes were along used as early as the beginning of the first century A.D. The route followed by Su-Wu in the middle of the third century A.D. started from Pou-nan. He embarked from the port of Chu-li. Then following the sea into the Great Bay and North-west he entered directly into it. He went past several countries along the bay and after more than a year arrived at the mouth of the Ganges.¹⁰⁰ Chu-li or Tou-Chu-li of the above account is taken to be a reference to Tokkola of the *Milinda-panha* to which mention has already been made and Takola emporion (160°30', 4°15') of Ptolemy. Sylvain Levi identified it with modern Takunpa on the Western coast of the Isthmus of Kra¹⁰¹ and H.G. Quaritch Wales, a small island north off the mouth of the river Takua-pa.¹⁰² If Ptolemy's evidence regarding location and direction has to be believed, Takola was a port on the north-western coast of Malay Peninsula and should be situated rather in the region of Trang, a viewpoint accepted by Sir Roland Braddell.¹⁰³ But, Chu-li (Chui-Chih/Mou-Chih), said to be situated eleven days' voyage southwards from Tun-sun-entrepot has been supported by Wheatley and Wolters to be located somewhere in the Isthmus of Kra.¹⁰⁴ Wang Gungwu, on his part, thinks that Chu-li of the Chinese text denoted the same place as Ptolemy's Coli/Kolo (164o20/, equat) and locates it in southern Malay Peninsula. Wolters is of the opinion that sailing from Chu-li into the great bay and crossing 'several countries' in the itinerary of Su-Wu stand for the Gulf of Martaban and the early Mon settlements.¹⁰⁵ It will thus be seen that there is nothing in the itinerary of Su-Wu also to show that the straits routes were already opened up in the middle of the third century A.D.¹⁰⁶ Merchandise in this trade of China and South-East Asia with India (in which the Ganga port undoubtedly played a very prominent part) was brought along the Gulf of Siam and unloaded in the eastern coast of the Malay Peninsula. From there after a short overland transport, merchandise was brought to the western coast of the Peninsula where possibly the northern, isthmian and southern parts equally participated and re-loaded into ships which then sailed north-west into the Bay of Bengal and cruised along the Tenasserim and Martaban coasts to reach the port of Ganga.

The Straits routes seem to have been opened for navigation some time in the fourth century A.D. for early in the 5th century A.D. Fa-hsian

travelled from Tamralipti of Ceylon and from there to Java.¹⁰⁷ Soon afterward in A.D. 431 Gunavarman voyaged along the same route. After the opening of the Straits routes undoubtedly a large part of India-trade passed through the Straits and Sumatra and Java rose into prominence. But the old trans-peninsular routes used in this trade did not go out of use. Indeed it is quite likely that with the increased depredations of pirates in the Straits of Malacca and in the Riau-Longga-archipelago and restoration of political peace and stability in Pou-nan/Chenla, traders reverted to the old trans-peninsular routes. In any case, there is epigraphic evidence to show that the Malay Peninsula was frequented by sailors and traders. Thus an inscription of the fifth/sixth century A.D. found in the Wellesley District of Malayasia refers to one Buddhagupta hailing from Raktamrttika (*raktamrttikavastavya*). The inscription is a prayer for success of the voyage (*siddhayatrah santa*). The object of the voyage has not been stated but the epithet *mahanavika* (great sailor) attached to Buddhagupta seems to suggest that he was a frequent voyager and his voyages, if really undertaken frequently, could have been only commercial in character.¹⁰⁸ This inscription is of particular interest to our present study. Buddhagupta is stated to have been an original inhabitant of Raktamrttika. Indian scholars are generally agreed in locating it in Bengal. Dr. N.R. Ray likes to identify it with Hiuen-Tsang's Lo-to-Mo-chih and modern Rangamati in Murshidabad District.¹⁰⁹ Indeed the remains of the *Raktamrttikamahavihara* have been unearthed at Chiruti nearby.¹¹⁰ It is therefore not unlikely that Buddhagupta sailed along the Ganges, came to the Ganga port at the mouth of the river and ultimately reached Malay Peninsula. Other identifications of this Raktamrttika have also been proposed. Thus R.C. Majumdar preferred Lalmai (Red Earth = Raktamrttika) in the Mainamati region of Comilla district.¹¹¹ But as has been seen earlier from the Pascimbhag C.P. inscription we know that the ancient name of Lalmai was Lal..... and not Raktamrttika. Raktamrttika of the inscription of the Wellesley District could, however, denote Rangamati in Chittagong district which H. Mitra sought to identify with Rohitagiri of the Rampal C.P. inscription of Sri Candra.¹¹² It must at the same time be admitted that non-Indian scholars believe that the Red Earth Land of the inscription actually represents Chih-tu which was visited by the Chinese ambassador Chang-Chun between A.D. 607 and 610 and which is generally located in Malay Peninsula itself.¹¹³ While Chih-tu of the Chinese texts has actually been described as containing red earth and may well be situated in the Malay Peninsula, its further identification with Raktamrttika of the inscription mentioned above is debatable. If Buddhagupta came from somewhere in the Malay Peninsula itself, he did not have to make a long or even difficult voyage to reach the site of the inscription. Hence the epithet "maha-navika" and the prayer for successful voyage, when applicable to him, lose much of their inherent force. It seems therefore,

more likely that Buddhagupta actually sailed from a red earth country situated in India and the probable locality was either Chiruti region in Murshidabad district of West Bengal or Rangamati in Chittangong district of the present Bangladesh.

From the above discussion it clearly comes out that even after the opening of the Straits routes, the partly sea partly overland trade across the Malay Peninsula remained functional. Indeed it is this trans-peninsular route from China to India which the Chinese pilgrims of the seventh century seem to imply as the 'northern route' in contradistinction with the 'southern route' which passed through Palambang, Malayu, Jambi, Kataha/Chieh-cha/Keda and the Nicobar islands. In Eastern India after the decline of Tamralipti as a sea-port the incoming vessels anchored at some port in Samatata or Harikela, the most important of which was on the mouth of the Padma/Ganga and, if not identical with present Chittagong, this port was situated not far away from it.

The maritime route from China to S.E. Bengal via Ceylon was a diversion and extension of the southern route described above. From Chieh-cha voyagers used to take a south-western and southerly route to reach Naga[artan (Nagapattana) and Ceylon. From Ceylon voyagers used to sail north-east and reach a port in Samatata or Harikela as was done by Wu-hing.¹¹⁴ In the 10th century A.D. Srijnana Atisa-Dipankara returned from Suvarnadvipa to Vikramasila-mahavihara along this route.

From the 10th century A.D. a clearer picture of the maritime routes connecting S.E. Bengal with the Middle East and Africa and S.E. Asia may be had from the writings of the Arab historians and geographers. Iban Khurdadbah and al-idrisi have furnished an account of coastal voyage from Bullin to Samandar and beyond in the east. Bullin was "the connecting link between the east and west coasts of the Indian peninsula and also the station from where travellers started to China via Sarandip (Ceylon)."¹¹⁵ The veracity of these writers has been questioned. Thus with regard to Iban Khurdadbah's account of South Indian coast, H.N. Hodivala has very caustically remarked that "Khurdadbah did not possess any personal acquaintance with Southern India and he seems to have lifted the names from some other writer who had picked them at haphazard and made a somewhat liberal use of his imagination in filling up the descriptions. The real distances of the places are so absurdly whittled down and the other statements are so trite, vague or obscure that it is difficult to relate them to any localities with which identification....."¹¹⁶ The case is, however, not so hopeless and it is possible to recognize the places mentioned and, what is more, the account given by Iban Khurdadbah gives a broad idea of the relative direction of the places enumerated. The route mentioned by Iban Khurdadbah^{116a} is as follows: Mahi-Malay (probably Malabar on the Western

coast of India) - Bullin¹¹⁷ - along the Coromondal coast Babattan-Sinjili¹¹⁸ - Kabashkon¹¹⁹ - mouth of the Kudaforid (= Godavari)¹²⁰ - Kailakan or Kilkyan¹²¹ - Al-Lawa-Kan(j)a¹²² - Samandar.¹²³ Beyond Samandar Ibn Khurdadbah mentions Orashin.¹²⁴ The fact that it has been placed beyond Samandar, it cannot denote Orissa as originally suggested by de Goeje and accepted by Nainar.¹²⁵ Dani suggests that the name is a deformation of Roshang or Rakhang which is the ancient name of Arakan. Philological correspondence apart, what is stated of its products and its king by Ibn Khurdadbah very well applies to Arakan, which as will be shown below maintained close political, economic and cultural relations with Harikela and, what may be regarded as its successor state, Pattikera. Beyond Orasin Ibn Khurdadbah mentions Abina which abounds with elephants. Beyond it lay the route to China. If Orasin is identified with Arakan, Abina has got to be equated with the Martaban coast of Burma, which again is possibly known as Nagadvipa in some Puranic literature.¹²⁷ The statement beyond Abina lies the China route may actually refer to the overland routes leading from lower Burma to Siam across the mountain passes outlined earlier in this study. If this be so, here is another evidence of the continued use of the partly sea partly overland route to China from S. East Bengal. In the account of Ibn Khurdadbah mention is next made of Lanjabalus i.e. the Nicobar islands. From here the voyager came to Kilah (Ko-lo of the Chinese) belonging to the kingdom of Jabat-Hindi (i.e. the Hindu Jaba). Kilah (i.e. Kalah) is mentioned by Masudi as 'a little more than half way to China' and as the rendezvous of Muslim ships from Siraf and Oman and of the Chinese ships.¹²⁸ A similar account is contained in a more or less contemporary work, which is sometimes attributed to the merchant Sulaiman.¹²⁹ According to this latter text, from Kalah one comes to Betumah (= Tiyyamah is Ibn Khurdadbah and al-Indrisi = ulau Tioman island) and from these ships used to set out for Kundrang (= Panduranga = Khamrang, S. Vietnam). Ibn Khurdadbah states: "On leaving Mait one finds to the left (i.e. north) of it the island of Tiyyama". According to Ibn Said (1208/14-1274/86), the Indian Ocean ends here and the Dehr-al-Muhit (Encircling Ocean) begun at 164° long., 4° lat. This itinerary from S.E. Bengal to China needs not be further pursued. Suffice it to say that in the 13th century A.D. Ibn Batouta sailed from Java to Sunarkawan (Sonargaon in Dacca district) and the first town of Bengal he entered was Sudkawan i.e. Chittagong. In the first half of the 15th century, the great Chinese sailor Cheng-Ho who undertook his voyages between A.D. 1407 and 1432 sailed from Sumatra to the Andaman-Nicobar islands and came to Chi-ti-Kiang (Chittagong).¹³⁰ From this latter place the Chinese envoys sailed upstream to So-no-ar-Kiang (Sonargaon) in small vessels covering a distance of 500 li (about 167 miles; present distance about 250 miles) and finally to Pantu-a (Pandua).¹³¹ In Ma-huan's version Chi-ti-kiang has been distinguished

from another port, pon-ko-la i.e. Bengala which is also mentioned by the Italian Varthema (1503-08) and the Portuguese Duarte Barbosa (1518). From Pon-ko-lo the Chinese sailed to Hou-lou-mo-asou (Hormuz) and other places in the African coast. A good idea of the sailing route from Chittagong to Singapur may be had from the following log which though slightly later than our period, applies largely for the period beginning from the 10th century A.D.:

"Section on the sea-routes near the Siamese main land. The journey from Sundib (Sondwip in the Ganges delta) and Faradib (presumably a neighbouring island) to Shati-jam (Chittagong) is [made in the direction] ESB; from Shati-Jam to the island of Zanjiiliya (a coral bank near Chittagong)¹³² - is done south and from Zanjiiliya to Najirashi (Cape Negrais) SSB. From Najirashi to Martaban also to the island of Pali (one of the southern Moscos islands), due South. From Pali to the island of Butom (P.Dutand) is due South and from Butom to the islands of Pulan Sanibilan to the islands of Pulan Jumar (Pulau Jemur, largest of the Area Islands) (it is due South and from Jumar) to the mountain of Pulau Basalar (Bukit Jugra i.e. Bukit Parceler or Pulau Parceler), SD by E, although some say ESB. Then from Pulau Basalar to Malacca is S.E. and from Malacca to Singapur, and this is the end of Siam to the South and there the Guardians (B, Y Ursae Minoris) are 5⁰ above the horizon ..." Then begins the section on the sea-routes of China.¹³³

IV

The fact of geographical contiguity put Harikela-Samatata-Vanga in the position of natural enemies of its immediate neighbours like Gauda, Kamarupa (Pragjyotisa), Arakan and Pagan (Burma). The Pursuit, first of a policy of consolidation and later, one of unabashed territorial aggrandizement launched the Candra and Sena rulers of S. E. Bengal on a path of war with powers ruling far away both in the North and in the South. On the other hand, North Indian powers like the Gurjara-Pratiharas, Candellas and Gahadavalas, Deccan powers like the Rastrakutas, Calukyas and Kalacuris and South Indian powers like the Colas, Karnatas and Coda-Gangas at various times actually invaded S.E.Bengal and came into conflict with its rulers. Evidently they were all inspired with the ideal of *digvijaya*¹³⁴ but beneath the apparent reality of political incompatibilities lay the more profound force of economic compulsion manifested in the form of exploitation of natural resources and trade.

Indeed the earliest contact of S.E. Bengal with the outside world was essentially of a commercial nature. In the first century B.C. the Chinese imperial envoy after sailing through a number of countries possibly came to Huang-Chih which, as seen earlier, was likely to be a port on the Ganga and situated not very far from modern Chittagong. The *Ch'ien Hau Shu*

records that "ever since the time of Emperor Nu-ti (141-87 B.C.) they (i.e. those countries) have all offered tribute". It is well-known that two so-called tribute-missions to China were but instruments of trade which guaranteed imperial protection to foreign merchants to sell the approved commodities. The *Chion Hau-Shu* further gives the modality of this trade in which Huang-Chih also participate. "There are chief interpreters attached to the Yellow Gate who, together with volunteers, put out to sea to buy lustrous pearls, glass, rare stones and strange products in exchange for gold and various silks The trading ships of the barbarians transfer (the Chinese) to their destination The large pearls are at the most two Chinese inches in circumference."¹³⁵ But it may be noted that according to the *Periplus*,¹³⁶ pearls were exported from Ganges which was probably identical with Hung-Chih. Again, the same Chinese source further informs us that during the Yuan-shin period of Emperor P'ing-ti (A.D. 1-5) Wang Mang sent rich gifts to the king of Huang-chih and commanded him to send an embassy to China to present a live rhinoceros.¹³⁷ It is interesting to note that the '*Akhbar as - sind wa'l hind*' in its own account of the kingdom of Ruhmi (= Rahma of al-Hasudi) by which the Pala kingdom was meant and which sometimes included East Bengal also, states that the striped Karkaddan is found in the country. It is an animal which has a single horn in the middle of its forehead, and in this horn there is a figure like unto that of a man.¹³⁸ It is further stated that these horns were much prized and domestic articles made of these used to be exported in China where they sold for two to three thousand *dinars*.¹³⁹

In the *Periplus of the Erythrean Sea* the port of Ganges which was likely to be identical with Huang-chih of the Chinese, was a market town. To this place were brought Malabathrum, Gangetic spikenard, pearls and muslins of the finest sorts called Gangetic.¹⁴⁰ From Domirica (i.e. the Dravida or Tamil countries) very large vessels called *colandia* used to flock to this port.¹⁴¹ The *Periplus* states that from Thinae (i.e. China) raw silk and silk yarn and silk cloth are brought on foot through Bactria to Barygaza and are also exported to Damirica by way of the river Ganges.¹⁴² It is not clear how silk stuff so brought to Barygaza could be exported to Damirica by way of the Ganges. It appears that a port of the silk imported from China through the Yunnan-Szechuan-Upper Burma-Manipur-Assam-North Bengal route used to find its way along the Ganges to the maritime outlet of Ganges from where it was re-exported to Damirica on *Colandu* vessels.

With regard to Chryso which was an island in the ocean just opposite Ganges was known for the best tortoise shell of all the places on the Erythrean Sea.¹⁴³ As we have already seen, Chryse (gold island) may well correspond to Suvarnadvipa (mod. Sondwip). It is therefore quite likely

that the Chinese procured some of their tortoise-shell from Chryso-Sondwip, though the *Hou Han Sha* explicitly mentions tortoise-shell required only from To-Ch'in. But it is to be remembered that the same text records the arrival in A.D. 156 and 161 of two tribute-missions to China from T'ien-Chu¹⁴⁴ which may here denote some region in Eastern India, if not actually S.E. Bengal.¹⁴⁵ The commercial character of the early contact of S.E. Bengal with the countries of S.E. Asia and China will be clear from other references as well. Thus, in the first half of the third century A.D. Kia-Siang-li, an inhabitant of a country lying to the 'World of India', narrated to Fan-Tchan, King of Fou-nan, the marvellous things available in India. This inspired the latter to send his relative Su-Wu to India. The route of travel of the ambassador has already been seen. The embassy returned to Fou-nan with a present of four Yueh-chih (i.e. Scythian) horses from the Miouen-Louen (= Murunda) king and was accompanied by an envoy named Tch'on-Song. The Chinese envoys Chu-ying and H'ang T'ai met Tchen-song at the founanese court.¹⁴⁶ The Chinese envoys came to Fou-nan to explore the possibility of procuring Indian and Western luxury goods along the maritime route via Fou-nan for the Imperial Wu dynasty of S. China during the period of three kingdoms was debarred from the overland route by the Wei and Shu rulers.¹⁴⁷ Hence the above mentioned text records that "it is clear that there was no direct contact and trade (of China) with North India, that is, via the Ganges."¹⁴⁸ Whatever be it, the contact so established seems to have been maintained and tribute-missions i.e. trade delegations from T'ien-Chu continued to come to China. Thus in A.D. 428 the mission Chia-pi-li brought among other things jessmine perfume and frankincense. Another T'ien-Chu state called Su-mo-li sent its mission in A.D. 441. Neither Chin-pi-li nor Su-mo-li be satisfactorily identified but their missions to China fell within the period of the Imperial Guptas.¹⁴⁹ Though Samudragupta (A.D. 330-375) claims to have received obsequance, gifts of maidens and application for issuance of charter of governance from all the islands (*sarvyadvipa-vasibhir-atmanivodano-kanyo-payano-garudmaden kasasana-yaonna*), he claims no suzerainty over China. His relations may have been limited to such islands in the Archipelago as Java and Sumatra. From Chinese sources we learn that trade missions went to China in 473 from T'ien-chu-po-li,¹⁵⁰ in 571 from T'ien-chu from T'ien-chu,¹⁵¹ in 656 from P'o-an,¹⁵² in 658 from Han-chi-Shih-li-chun and Mo-la,¹⁵³ in 662 from Kan-chi-fo¹⁵⁴ and in 720 from Nan T'i-chu¹⁵⁵ i.e. South India. But none of these can be shown with any amount of certainty to refer to S.E. Bengal, though from this it should not be concluded that S.E. Bengal did not participate in the mercantile enterprises with the Chinese world.

The picture becomes clearer in the period under review. The motive of economic gain by extending the area of commercial enterprise and/or

by exploitation of natural resources is now discernible in the contacts of Harikela-Samatata-Vanga with the outside world. Thus, in the description of the *digvijaya* of the Candra ruler Trailokya Candra¹⁵⁶ it is found that out of curiosity he tested the curd of Vanga at Krisnasikharigrama and then Kambojas possibly advanced as far as Lalambi forest which was famous for its efficacious medicinal herbs, curio objects, luxury consumption goods like curd of Vanga prepared at Krisnasikharigrama. This point is further elucidated in the account of *digvijaya* of Sri Candra. He is credited with the conquest of Kamarupa and stated to have advanced along the Lohitya (Brahmaputra) through the black gharu-wood forest and meadows by the river Comari where yaks romped. The real incentive in these opportunities to have been assured control of the black gharu-wood forests and yak tail producing mountainous regions. As seen earlier, the reputation of the aloes-wood of Kamarupa and the manner of its transport to these parts of Somandar have been described by Ibn-Khurdadhab and al-Idrisi. His Himalayan quest of victory in Uttarapatha and over the Yavanas and Hunas in the extreme north-west of the country gave him at least temporary control over the North-west-south-east trunk route and the fluvial way of the Ganges. The same motive of gaining monopoly control, if not over all trade, at least over the trade-routes, seems to have inspired both Trailokyacandra and Sri Candra to proceed towards the South. The former crossed the Vindhya and Malaya mountains and reached the banks of the Kaveri in the far South, while the latter reduced Utkala i.e. the South-eastern coast of India. Even though the description is rather conventional and may not be taken literally, the spirit of gaining control over all the trade routes, and particularly of the middle and lower Gangetic basin, may be seen in those accounts.

It is again the same motive of furthering their economic interest at the cost of Harikela-Samatata-Vanga that led outside powers of northern, Eastern and Southern India to invade this country.¹⁵⁷ Two examples may be cited by way of illustration. First, in A.D. 953 the king of Arakan Tsula-taing Tsan-da-ya set out against Thuratan and advanced upto a place which since came to be called tsat-ta-going (lit. 'to make war is improper'). He set up a trophy there and returned. This is one explanation of the name Chittagong, in the vicinity of which lay the ancient port of Ganges-Samandar.¹⁵⁸ The loss, even if temporary, of the port of Chittagong-Ganga must have been ruinous for the king of Harikela. If not anything else, this demonstrated his vulnerability and encouraged the other most important rival of South East Bengal in the trade of S.E. Asia and China viz. the Colas.

The accounts of such Chinese pilgrims as I-tsing, Wu-hing, Seng-Chi and Tan Kwong leave no doubt that the people of Harikela-Samatata-Vanga had an important share in South East Asian and also in Nan-Hai (South

China Sea) trade.¹⁵⁹ A number of inscriptions written in North Indian pre-Nagari script imported from Bengal and datable in the 8th and 9th centuries A.D. has been found in Java and Cambodia.¹⁶⁰ This is indicative of the physical presence in these countries of a sizeable number of persons using this script. In other words, there were some people from North India who settled in these countries, and after the decline of Tamralipta, they were likely to have made voyages from some port in S.E. Bengal. Many of these must have been merchants who after the sack of Canton by the Po-sso (non-Muslim Persians) and Ta-Chih (Muslim Arabs and Persians) in A.D. 758 retired to the South.^{160a} It is reasonable to assume that they maintained close and constant relation with the land of their origin and there was regular cargo and passenger traffic between S. East Asiatic countries and South East Bengal. It is only on this assumption that the construction of a monastery by the king of Yavabhumī, the Sailendra Balaputradeva at Nalanda and the grant of five villages for the upkeep by king Devapala in c. A.D. 850 make sense.¹⁶¹ The Sailendra rulers maintained good relations with both the Palas (and no doubt with the rulers of South East Bengal) and the Colas. In A.D. 992 king Cudamani-Varmadeva of Sri Vijaya constructed the Cudamanivihara at Nagapatam and in A.D. 1005 the Cola ruler Rajaraja granted a village for the maintenance of the Sri Vijaya temple. But there was conflict of interest between the Bengal powers and Colas over the control of S.E. Asian trade and between the Colas and Sailendra of Sri vijaya over the monopoly control of the Straits routes opening up to the Non-hai trade. Both the Colas and the Sri Vijayan rulers sent embassies to China in A.D. 1015 and 1003 respectively and wanted to keep the Chinese emperor in good humour. The Cola ruler further seems to have entered into alliance with the Khmer ruler (he cannot be anybody else than Suryavarman I) who, according to the Karundai plates sought the friendship of the Cola king for his own protection.¹⁶³ From the point of view of the Cola ruler, this alliance must have been to coordinate action to countermeet the rivalry offered by the rulers of Bengal and the Sailendras of Sumatra. He must have wished to keep open the transpeninsular trade route passing through Isthmus in Malay Peninsula.¹⁶⁴ After having so secured himself the Cola king Rajendra set out on *digvijaya*. After having conquered Odda-vīśaya and Kosala-nadu the Cola general seized successively Tandabutti (Dandabhukti, Danton in Midnapore district under Dharmapala, Takkanaladham (S. Radha) under Ranasura, Vengalades, as under Govindacandra (son of the Candra king Ladahacandra) and Uttiraladha (N. Radha) under Mahipala II of the Pala dynasty. Govinda-candra fled from the battlefield and Mahipala is said to have been frightened.¹⁶⁵ Since his army advanced as far as the Ganges Rajendra Cola assumed the title Gangaikonda, victor of the Ganges. The invasion of Rajendra Cola in the north was followed by a naval expedition against Sri Vijaya and others like Malaiyur (Jambi), Tulaitakkolam (Ptolemy's

Takola), Itamuri-desa (=Lamuri of the Arab geographers; Lambri of Marco Polo; Lan-wu-li of Chao-Ju-kua, extreme north of Sumatra), Nokkaharam (Nicobar islands) and Kadaram (Kedah).¹⁶⁶ It may thus be repeated that the expeditions of Rajendra Cola against Bengal and in S.E. Asia were directed to eliminate all trade rivals.

In the same way the rulers of Pagan wanted to dominate the economy of Pattikera,¹⁶⁷ the most notable among the successor states to Harikela. *The Glass Palace Chronicle* mentions that during the reign of king Anawaratha (A.D. 10044-77) two Ka-la brothers were shipwrecked near Thaton. Later the Burmese king conquered the Ka-la country of Pateikkaya, where he left a stone human image.¹⁶⁸ The interrelation of those two events is not known but Pattikera must have passed itself as a great competition of Pagan in the trade of the bay of Bengal and so required to be chastised. It will be seen that Pagan rulers also wanted not only to acquire free and unobstructed access to the sea but really were keen to eliminate their trade rivals. This will be further evident from the fact that king Alaungsithu Chan'sa-Jayasura, (A.D. 1112-87), grandson of Kyanzittha successfully placed his protege Lokyaminnan on the throne of Arkan and then fought a naval battle against Pateikkaya-Pattikera. Alaungsithu seems to have been defeated at Taungayo. In this naval engagement, the Talaings of Bossein also fought on his behalf and perished. A contemporary Burmese inscription of A.D. 1184 also mentions Pattikera.¹⁶⁹

If the conflict of antagonistic economic interests of Harikela-Samatata-Vanga and its competitors in trade was often sought to be resolved by recourse to arms, at least in one sphere there is evidence of continuous and perfect understanding, nay even perhaps of collaboration between the S. Eastern Bengal poweres and Arakan and possibly also the Caliphate. This is in respect of coinage. In this connexion the following may be noted:

i) Two silver coins from Salvan Vihara of the Mainamati region bear the legend Dharmavijaya, a name assumed by an Arakanese king ruling in the seventh century A.D.

ii) Two hordes containing 52 and 72 silver coins from Salvan Vihara (period III, 8th century A.D.), and one horde containing 63 coins from Anandacandra's palace at Mainamati have been found. Of the legend 'Harikela' engraved on many of these coins, the first letter resembles the letter *ha* in a stone inscription of Niticandra of Arakan found in the Sandoway district of Arakan, while the last letter resembles the *la* found in another inscription near Ngalungnaw in the same district. From the point of view of typology, metrology and weight system these coins are very similar to the Candra coins of Arakan. It is therefore quite obvious that

the mint-master of Arakan region influenced their counterparts of a contiguous territory lying to its east and northeast like the Chittagong district.¹⁷⁰ But here the question is much more than one of simple influence. What is involved is close and continuous contact leading to conscious collaboration in the matter of currency. The point requires further elucidation. The Harikela coins fall into two series Series I: (7th-8th centuries: silver, round, 2.6×2.8 cm; -3.12 cm; 5-7 gms) and Series II (9th-12/13th centuries: silver, round; 4.8×4.95 cm. -5.85×5.53 cm. or even 5.85×5.95 cm; 2-3800 \times 3-3660 gms). For a certain period both these series were in simultaneous circulation 'as a part of either official or unofficial currency during the reign of the Candras'.¹⁷¹ While the first series of Harikela coins influenced the coinages of Pattikera¹⁷² and of the Akara family, numerous silver coins have been found which are imitations of the Harikela coins, series II. They have similar shape, size, dimension, metrology and weight as the Harikela coins, Series II. The legends are names of localities like Veraka, Viraka, Piraka, Sivagiri, Jayagiri, Lala (giri) etc.¹⁷³ It is interesting to note that some of these place-names are of Arakanese origin. Thus Veraka/Viraka/Piruka etc. (= mod. Pilak, Pilak Pathar, Belonia subdivision, Tippera district) is derived from Pilakka-Vanaka which occurs in a 9th century inscription on a pillar at Sitthaung Pagoda, Morhaung, Arakan.¹⁷⁴ At first sight the simultaneous circulation of so many currencies may appear as an indication of political disintegration but it may be asserted that coinage was not perhaps regarded as a prerogative of the government¹⁷⁵ and this encouraged the mining of local coins by unofficial agencies from different mints to cater to the demands of a flourishing trade.

From the above discussion one may hazard the hypothesis that the entire region comprising Harikela-Samatata-Vanga and Arakan formed sort of a unified trade zone between the 7th and 13th centuries A.D. The vicissitudes of trade affected the currency system of all the constituents of the zone. This would explain the changes brought about in the weight and dimensions of the Harikela coins, Second series. The weight of coins was changed from 5-7 gms. Series 1 to 2, 3800-3,660 gms. in Series II. The diminution in weight has been explained by Dr. B.N. Mukherjee as due to making a currency conform to the older Puranic weight but the smaller quantity of silver contents in the second series of coins which started in the 9th centuries A.D. was to a large extent a sequel to the total prohibition on export of currency and silver and gold from China after the sack of Canton by the Po-sse and To-Shih merchants in A.D. 758. After burning and looting Canton, these foreign merchants escaped by way of the sea and retreated to the South. The Nan-hai trade never recovered from this shock fully but burning and pillaging of Canton and murder of foreign merchants residing there by Huang Chao in A.D. 878

gave a staggering blow to the South China Sea trade in which Arabs, Persians, and Indians participated.¹⁷⁶ The loss of the Chinese market resulted in a diminution in import of silver,¹⁷⁷ which reality again was reflected in the currency pattern.

As for the change effected in dimension of Harikela coins, Series II, Dr. B.N. Mukherjee notices that the plan of the coins of Series II and of the coins of the Abbasid Calips is similar. This may point to some currency adjustment of South East Bengal with the Muslim world, which in turn would be the result of a somewhat voluminous and frequent trade between them. It is worth examining whether any evidence in this regard exists.

One silver coin of Harun-ur Rashid, dated in A.D. 788 and issued from the Mohammadiya mint has been found at Paharpur.¹⁷⁸ At Mainamati, a silver coin bearing legend in Kuphic characters and belonging to the early Abbasid period has been unearthed at the 7th/early 8th century level of a cell at Salvan Vihara. Finally, a gold coin with legend in Kuphic characters issued by the last Abbasid Caliph Abu Ahmed Abdullah al-Mustassim b'illah (A.D. 1242-1258) has been discovered from the upper level at Kotila Mura of Mainamati.¹⁷⁹ Without further corroborating evidence it is difficult to agree with Dr. Enamul Haque that the coin first referred to above was brought by some Muslim preacher who came to this part of the globe during the reign of Caliph Harun-ur-Rashid. But with regard to the two others, F.A. Khan may be justified in holding that these were 'perhaps the first documentary evidence of Arab trade with South-East Bengal during the Buddhist period',¹⁸⁰ though the possibility remains that the silver coin at least was brought there by traders or travellers at a later period. Indeed literary evidence of Arab trade relations with S.E. Bengal comes forth from the middle of the ninth century A.D., the first of those being the '*Akhbar-as-sin wa'l Hind* (Tales of China and India), sometimes attributed to the merchant Sulaiman (A.D. 851) and the '*Kitab al-masalik Wa'l mamalik* (Book of the Roads and kingdoms) of Ibn Khurdadhbah (A.D. 844-8), as has been already seen in connexion with discussion of maritime routes of S.E. Bengal. It may therefore be stated that at least from about the middle of the 9th century A.D. (which is incidentally also the approximate starting period of the Harikela coins, Series II), overseas trade contact between the Arab world, S.E. Bengal and S.E. Asia was constant and ever increasing. In this trade the Arab enjoyed pre-dominance and this evidently necessitated a change over in the size and metallic contents of Harikela coins in order to make them easily convertible with the Caliphate coins.

Besides pursuit of glory through territorial aggrandizement and the

impulse of material gains through trade and commerce, nobler sentiments and religion inspired voyage of pilgrimage and proselytization from Harikela-Samatata-Vanga and *vice-versa*. Thus it is on record that the Candra king Ladahacandra (c.A.D. 1000-1020)¹⁸¹ went on pilgrimage to Varanasi and to the confluence of the rivers Ganga and Yamuna (i.e. Allahabad). At both these places he took a purificatory bath, performed offerings to his ancestors and distributed immense wealth to the Brahmanas.¹⁸² Again, the referential manner of description of the conquest of Puri, Banares and Allahabad, three of the holiest places of pilgrimage in the Brahmanical religion by Lakshmanasena in the Edilpur C.P. inscription of his son Kesavsena shows that the king was inspired by religious sentiments more than anything else.¹⁸³

* As for people coming to S.E. Bengal for religious purposes, the earliest and perhaps the most eloquent evidence is that of Gangaraja/Ti-Tuhen of Champa who abdicated the throne and came to live on the bank of the Ganges since the sight of the Ganges is a great joy in the sixth century A.D.¹⁸⁴ In the first half of seventh century Hiuen Tsang visited Samatata and from the Memoirs of I-tsing who does not seem to have ever visited S.E. Bengal we learn that in the latter half of the same century Tan Kwang came to Harikela by the southern route. On his arrival he was given a warm reception by the king of the country. Tan Kwang got a temple built there, procured books and Buddhist images and ultimately breathed his last there.¹⁸⁵ Another contemporary Chinese pilgrim to visit Harikela was Wu-hing who arrived by way of Ceylon,¹⁸⁶ while Sengchi, who followed the Southern route came to Samatata (which was at the time politically independent of Harikela), possibly during the reign of Rajarajabhata of the Khadga dynasty.¹⁸⁷ Of those three Chinese pilgrims only Tan-Kwang actually settled down in Harikela. In the middle of the 9th century A.D. Sailendra king Balaputradeva of Yavabhumī built a monastery at Nalanda for the visiting monks from Suvarṇabhūmī. As has already been seen those pilgrims had of necessity to pass through Harikela-Samatata region.¹⁸⁸

The same argument of passage through Harikela-Vanga on way to places of Buddhist pilgrimage and undertakings of works, construction at such places brings Arakan closer to this region. To give a few examples: In the 6th century A.D. a Candra king of Arakan made a gift of the village of Dengut to Jetavana. It was placed in charge of the fraternity of monks of all lands including the Elders of Jetavana (*agatanagata-jetavana-vasisthavira-caturddisaryya-bhikṣu-sangha*, 1. 12).^{188a} There has been found a huge monastic establishment with a large tank near the Katila Hura site of Mainamati. It is locally known as Ananda Raja's Palace. The king Ananda is generally identified with the third king of the same name of the Deva dynasty which ruled between the last part of the 7th and the

middle of the 8th centuries A.D.^{188b} But it may be pointed out that the Arakanese king Anandacandra of Vesali/Vethali built *mathas* named Anandamadhava and Anandesvara and *viharas* called Anandodaya. It is therefore not unlikely that the Ananda Raja's Palace at Kotila Mura was constructed by this Arakanese king.

Again, Lak-yaminna, the protege of the Pagan king Alaungsithan Chaintse-Jayasura (A.D. 1112-87) on the throne of Arakan, undertook work of repair at Bodhgaya.^{188c}

There are also a number of eminent missionaries who hailed from S.E. Bengal and carried on academic pursuits and proselytization in countries both within and outside India. The first among these is Silabhadra who according to Hsuen Tsang was a scion of the Brahman royal family of Samatata. He went to Nalanda and received at first instructions and later ordination from Dharmapala. From the same source we learn that Silabhadra and the monastery of Nalanda were threatened with dire consequences by King Bhaskaravarman of Kamarupa if Silabhadra did not comply with the latter's request of sending the Chinese Master of Law to Kamarupa, whereupon the request was complied with at the beginning of A.D. 643.¹⁸⁹

In A.D. 782 during the reign of the Sailendra King Sangramadhananjaya, the grandfather of king Balaputradeva referred to above, a master named Kumaraghosa from Gouda erected at Kelurak in Java an image of Bodhisattva Manjusri syncretizing the three Jewels of the Buddhists the Brahmanical Trinity and all the gods.¹⁹⁰ Though Kumaraghosa has been called a Gaudi i.e. hailing from Gouda, he could reach Java only after sailing from a port in S.E. Bengal.

According to the *Pag San Jon Zang*, a work compiled in A.D. 1747 Santiraksita was a native of Zahor which, in the opinion of Dr. B. Bhattacharya, is the phonetic equivalent of Sabhar, a well-to-do village near Dacca. For proselytizing he went first to Nepal and later to Tibet.¹⁹¹

Another illustrious missionary from Samatata-Vanga was Srijnana-Atisa Dipankara. In Tibetan texts he is stated to have been born in A.D. 980 in the royal family of Gauda at Vikramapura in Bangala. This part of the account is somewhat confusing. Evidently, he was born at Vikramapura in Vanga and in view of the evidence of the Pala rule over Vanga as furnished by the Mandhuk image inscription of year 1 of Gopala II,^{191a} it is not unlikely that the Tibetan texts would call Atisa a scion of the royal family of Gauda. In any case, the fact remains that he originated in Vanga-Bangala. At the age of nineteen he took the sacred vows at the Odantapuri-vihara from mahasamghika Acarya Silaraksita and was christened Dipankara Srijnana. He received ordination as *bhiksu* at the age

of 31 and took the vow of bodhisattva from Dharmaraksita. After seven months' journey in a merchant vessel he arrived at Suvarnadvipa with a view to studying Buddhism under the guidance of Candrakirti, the High Priest of Suvarnadvipa. After a stay of 12 years in Suvarnadvipa, he returned to Magadha via Tamvradvipa (i.e. ceylon).^{191b} On invitation from king Nayapala I he assumed the charge of the High Priest of the Vikramasila monastery. Later, he went to Tibet where he succeeded in restoring the glory of Buddhism after eradicating the Tantrika and other aberrations. Atisa died in Tibet after living there for 13 years.

V

In ancient and early medieval India there was much spatial mobility of the people which sometimes even assumed the form of ethnic migrations. People from one part of the country moved to other parts for various purposes, political, economic, social and religious, and some times settled down there. The Mallasarul Grant of Vijayasena issued in the 33rd regnal year of Gopacandra mentions Brahmana Vatsasvamin of the Kaundinya-gotra as the instance.¹⁹² Brahmanas of this gotra are known to have been natives of the Parava country. Hence it is likely that Vatsasvamin came from S. India and settled in S.E. Bengal. Again, the Kalimpur C.P. inscription (I.42) of Dharmapala mentions an *Udragrama* i.e. a village inhabited by settlers from Orissa.¹⁹³ It is not unlikely that this village was situated in the coastal region of S.E. Bengal. The process of ethnic settlement initiated early in the 8th century A.D. seems to have accelerated in the next century. Thus the Candras might have come from Rohtasgarh region of Bihar if this be taken as identical with Rohitagiri, their original home as stated in the Rampal inscription of Sri Candra.¹⁹⁴

Whatever be it, there is no uncertainty as to the Karnata origin of the Senas. According to the Deopora inscription of Vijayasena (A.D. 1097-1159) his ancestor Samantasena fought for Karnata-lakshmi i.e. Karnata royal fortune.¹⁹⁵ According to the Naihati copper plate of Vallalasena, the Senas first settled in Radha from where Vijayasena transferred his capital at Vikramapura.¹⁹⁶ Again, the Yadavas under Jatavarman (c.A.D. 1050-1075) seems to have migrated from Simhapura (mod. Singapuram situated between Chicacole and Narasannapeta)¹⁹⁷ to Vanga in the bandwagon of Kalacuri Karna.¹⁹⁸

Apart from political adventurers seeking fresh grounds of spoil in S.E. Bengal, people of more humdrum professions and persuasions also settled here from other parts of India. Reference has already been made several times to the settlement of a large number of *desantarivas* (outsiders) as contrasted with the Vangalas i.e. the indigenous population in Candrapura-visaya in the Paschimbhag C.P. inscription. We shall see that

there is reason to believe that those outsiders probably came from present Karnataka–Tamil Nadu region. Again, Adideva, the grandfather of Bhatta Bhavadeva of the Suvarna–gotra who is the author of the Bhubaneswar plate, settled in Vanga from Siddhala–grama in Radha.¹⁹⁹ The Belava C.P. of Bhojavarman which informs us of migration of Vedika Brahmana from Madhyadesa (1.43).

Then the Mainmati C.P. inscription of Ranavan–kamalla Harika (sic e)–ladeva (d. 1141s' = A.D.1219) who had his capital at Pattikera commences abruptly with the eulogy of one Hedi–eba. It mentions his son Sri Dhadi–Aba who was the *amatyatilaka* (chief minister) and *mahasandhi–vigraphika* of the ruling king. The writer of the record named Medini–Aba as belonged to this family of officers. The extraordinary name–ending 'aba' in those three names has appeared to the editor of the record as Sanskritization of a foreign appellation. To quote him, "We are, therefore tempted to hazard the conjecture that here we have evidence of a respectable family of Burmese origin which settled and survived in the 13th century A.D. in the district of Tippera. For 'ba' and 'ya–bo' (modified to 'e–va') seem to be the characteristic of Burmese names even now. The inscription may thus be regarded as corroborating in a peculiar manner the intercourse between the kingdom of Pattikera and Burma as recorded in the Burmese chronicles.²⁰⁰ In this connexion it is worth mentioning that terracotta plaques with representations of Burmese/Arakanese men and women found at Mainamati are further corroborating evidence of a sufficiently strong physical presence of these elements in the population of Harikela–Samatata–Vanga.²⁰¹

As evidences of people from S.E.Bengal settling in other parts of the country, mention may be made of two ruling families of Orissa which claimed to have hailed from Rohitagiri which, as has been seen above, better corresponds to modern Rangamati in the Chittagong district. The names of the rulers of both the families ended in '*tunga*'. One was founded by Jagattunga around 9th century A.D. and the other, by Ranaka Vinitatunga. These dynasties ruled over parts of Talchar Pal Lahara and Keonjhar regions.²⁰² Again, towards the close of the 9th century A.D. King Devendravarman IV of Orissa is stated to have made grants of a *pradesa* (i.e. part) of a village to a few Brahmanas from the Vanga country. Those latter are described on people 'who are eager in preparing sacrifices and studying the Vedas, are well–versed in the Vedas and Vedangas, and who always practise *dharma* as prescribed in the Srutis and Smrtis'²⁰³

As a matter of fact Saiva teachers and other intellectuals from Gauda–desa and Daksina Radha are known to have settled in different parts of North, South and Western India and exerted considerable influence over people in the land of their option.²⁰⁴ It will be indeed surprising

if similar teachers from Samatata-Vanga lagged behind and failed to emulate their counterparts from Gauda and Daksina Radha. However, concrete evidence in this respect is lacking. There is of course, one very interesting example of spatial mobility in pursuit of vocation. Thus, in the Bhagalpur C.P. inscription of Narayanapala we read that one Sri Mankhadasa, son of Subhadasa and a native of Samatata engraved the document.²⁰⁵ If the word for engraving *utkirnam*, refers to the actual work on the site of the inscription, Sri Mankhadasa must have gone to Bhagalpur. Even if it refers to the execution of the work on a copper plate at the capital, it has to be admitted that the engravers moved far away from his place of birth in search of livelihood. The Jajilpara C.P. inscription of year 6 of Gopala II²⁰⁶ again informs us that Vimaladasa, the engraver of the document was the son of Manghadasa who had been born in Samatata. It is not difficult to see that Mankhadasa of the Bhagalpur C.P. inscription and Manghadasa of this document are identical. It may thus be surmised that a family of engravers who were originally residents of Samatata in every likelihood migrated successive to N.E. Bihar and N. Bengal.

People from S.E.Bengal are also known to have settled in countries outside India. In this respect the Arakan chronicle *Radzo Wong* informs us that during the reign of Na-ha-taing Tsan-da-ya (A.D. 788-810) some Ku-la (or Ka-la) ships were wrecked upon the island of Ran-byi and the sailors were later settled in Arakan.²⁰⁷ From the Burmese *Glass Palace Chronicle* it is clear that Kala or Ku-la refers to the Pattikera region²⁰⁸ and incidentally it may be mentioned that Pattikera was the capital of Ranavankamalla Harika (sic. ke)-ladeva. Rai-byi has been identified with Ramreo (Ibn Khurdadhbah) and the kingdom of Rama which Ralph Fitch, who was in India between A.D. 1583 and 1591, situates between Chittagong and Arakan which were under the same king.²⁰⁹

There are also some definite and some probable cases of matrimonial relations between the royal families of S.E.Bengal and of other states. Thus Ramadeva, the queen of Vallalasena was born in the Calukya royal family.²¹⁰ Jatavarman of the Varman dynasty married Virasri, daughter of Kalacuri Karna.²¹¹ The Burmese *Glass Palace Chronicle* records that a king of Pattikkaya (= Pattikera) fell in love with Shwo-sinhi, daughter of king Kyanzitha (A.D. 1083-1170) but could not get her. According to the same source, the king of Patikkaya gave his daughter to king Alakagahu who rechristened her as Prabhavati. This princess was taken as consort by king Karathu (A.D. 1187-91) who, however, put her to death. Her death was avenged by the Ka-la (evidently referring to Pateikkaya) king whose agents murdered Maratha.²¹² The king of Pateikkaya is supposed to be none else than Harika (sic. ko) ladeva Ranavankamalla of a Mainamati C.P. inscription. The story is told somewhat differently in the

Arakanese *Rad-weng*. It mentions a matrimonial alliance between the royal families of Pattikera and Arkan. It is stated that 'a certain king of Pateikkera of the kingdom of Marawa' sent his two daughters as presents to the kings of Arakan and Tampadipa. The Arakanese general sent one of those princesses to Marathu, king of Pagan, with the request to send her to Tampadipa. Marathu, however, kept her in forcible confinement. On being rebuked by the princess for his misdemeanour, an enraged Marathu killed her. The murder was then avenged in the manner described above.²¹³

From the above accounts, it is clear that marriage alliances were sometimes contracted by the kings of Pattikera with Arakanese and Burmese royal families.

There are also some probable references to matrimonial alliances contracted by the rulers of Bengal with ruling dynasties of countries lying outside the confines of India. In this respect mention may be made that king Balaputradeva of Yavabumi was a grandson of king Dharasetu by his mother Tara. Some scholars like to identify king Dharasetu with Dharmapala of the Pala dynasty.^{213a} This is to say the least, unwarranted since Dharmasetu is more likely to have been the king of Sri Vijaya who was the author of the foundation recorded in the Ligor stile inscription, Face A.²¹⁴

Further, there is an extremely obscure passage in the Belava Grant of Bhojavarman which has sometimes been taken to refer to his father Samalavarman's anxiety in the welfare of the king of Lanka (Ceylon). It has been suggested that Tilaka-sundari mentioned in the *Mahavamsa* as the queen of king Vijayavahu of Ceylon was identical with Trailokyasundari, the daughter of Samalavarman,²¹⁵ but Dr. A.M. Chowdhury correctly states that there is nothing definite to help us to arrive at a firm decision.²¹⁶

From the foregoing discussion it becomes clear that Harikela-Samatat-Vanga received settlers from outside as well as sent out its own natives in other states, both Indian and foreign, and its contact with the outside world was uninterrupted during the period of the present study. It will be therefore worthwhile to study in depth the impact which such contacts produced on the social organization and religious life of the people of the region as also its contribution to the development of culture and civilization of the countries with which it communicated.

One characteristic feature of the social organization of ancient Harikela-Samatata-Vanga was the institution of *Kulinism*. It has been opined that it was of South Indian origin and was only formalized by the Sena king Vallalasena who had his capital at Vikramapura. With regard to the process of introduction of the institution it is worth quoting

Dr. Sircar: "It is therefore very probable that the Arindama story regarding the import U.P. Brahmanas to the South (as the origin of the Idangai, left-hand communities) was carried to Bengal by some Tamilian settlers migrating to Bengal during the age of the Palas and Senas, and that it later appeared in the *Kula-panjas* as the Adisura legend about the import of Brahmanas from the same region (Antarveda/Kanauj) to Bengal. The development of the Adisura story in the *Kulapanjis* thus appears to be one of the result of the settlement of South Indians in Bengal in the Pala-Sena epoch."²¹⁷

Another interesting development in the social physiognomy of early mediaeval Bengal is the crystallization of the professional groups of the *vaidyas* (physicians) into a full-fledged caste. Such was their status only in what constitutes nowadays Tamil Nadu and Kerala, where the barbers who act as surgeons are called *Ambasthas* and *Vaidyas*. Ptolemy also places the people called Ambastai-Ambasthas near Mt. Bettigo (= Malaya = Travancore Hills). The *Vaidyas* were held in high esteem in the South where they often occupied important administrative posts.²¹⁸ Dr. Sircar thinks that possibly some Ambastha-Vaidyas of S. India came to settle in Bengal and "merged themselves in the local physician classes to develop ultimately the Bengal Vaidya community."²¹⁹ This assertion seems to be confirmed from the Pascimbhag C.P. inscription of year 5 of Sri Candra which mentions to Vaidyas among the beneficiaries of the land-grants made by him in the settlement of Candrapura-visaya. Indeed in the Vaidya *Kulapanjis* of Bengal there are numerous S.Indian (more particularly Kannada) names like Vallala. The transformation of *Vaidyas* from a professional group in a rigid caste took place in the 9th/10th century in the region of study.

The cult of dancing Siva (Siva Nataraja) is very likely to have been introduced and popularized in S.E. Bengal by the southern settlers who, according to Dr. Sircar, are same during the period of the Palas.²²⁰ However, the earliest Siva images so far discovered are of the time of the Candras. Bhavadeva, son of *karmantapala* Kusumadeva installed an image of the Ladahacandra.²²¹ Again, Govindacandra made a grant in favour of Nattesvara Siva.²²²

The contribution of Harikela-Samatata-Vanga in the sphere of culture lays primarily in the spread of its script in Arakan, Java and Cambodia. It has been shown that the script with two fragmentary bell inscriptions of the Candra kings of Arakan found at Vesali near Morhaung (Akyab district, Arakan) was derived from Eastern Bengal and closely related to the script used in the Faridpur Copper Plates of Dharmaditya and Gopacandra. Professor Johnston, however, believes that the script of the bell inscription was described from a slightly later variety. That this was not an ephemeral influence but one of lasting duration becomes clear from

a comparative study of the palaeography of the legend *harikela* engraved on Harikela coins and of some Arakan inscriptions. It has been pointed out²²⁴ that *ha* and *la* of the coin-legend resemble respectively with that found in an inscription of Niticandra in the Sandoway district of Arakan and in another inscription found near Ngalongmaw in the same district.

Again it is the Northe Indian pre-Nagari character rather proto-Bengali script which has been used in the Javanese inscriptions found at Kalasan (A.D. 778) and Kelurak (A.D. 782) and later in the digraphic inscriptions of the Combodian king Yasovarman (A.D. 889-900). Coedis believes that the influence radiated from W.Bengal and the University of Nalanda.²²⁵

Apart from script, the *Kavya* style known as *Gaudi-riti* has been sometimes employed in the composition of *prasastis* in Khmer inscriptions.²²⁶ It is likely, though by no means certain, that their authors originally came from Gauda i.e. N. Bengal and through the route or routes outlined earlier in the present study.

It is of course more problematic when it comes to the question of the introduction of the *bhaiksuki-lipi* in Pagan, where an inscription written in this script has been found.²²⁷ However, the route of dissemination of this artificial script from Odantapura (modern Bihar Sharif) monastery, the place of its origin to Pagan possibly lay through N. Bengal where specimen of this script has been found,²²⁸ but the script might reach Pagan from S.E. Bengal and Sylhet as well.

If Pagan did not receive from Harikela/Pattikera its script, either regular or ecclesiastic, it was not so in respect of architecture. It may be shown that by virtue of the square lay-out and cruciform plan, the Candi Kalasan (A.D. 788) of Central Java, the Ananda temple at Pagan (A.D. 1090), the Somapur-vihara at Paharpur (North Bengal) and the Salvan Vihara at Mainamati all belong to the *bhadra* type. It may further be stated that the Salvan-vihara was constructed by the last known Deva king Bhayadeva in the last quarter of the 7th century or early in the 8th century A.D. But the Somapura-vihara cannot be dated earlier than the time of Dharmapala (A.D. 750-810) i.e. before the middle of the 8th century A.D.

REFERENCES

1. *Epigraphia Indica* (abv. *E.I.*), XXVIII (1949-50), 378; Inscription of Bhavadeva, *Journal of the Asiatic Society (Letters)* abv. *J.A.S.L.*, XVII (1951) 89-90.

- 2 It may be noted that the territorial jurisdiction also varied with change in political power. It has been held that Vanga was "a large country comprising a vast tract of land between the rivers Brahmaputra to the east and Hughli to the west, Varendra to the north and the bay of Bengal to the south" (P.L.Paul, *The*

Early History of Bengal, I., Calcutta, 1939, iv) A.K.M. Yaqub Ali also holds that at least from the 12th century A.D. Vanga "generally corresponded to the eastern and southern Bengal lying on the eastern side of the river Bhagirathi and comprising mainly, as it appears, of Chittagong and Dacca divisions (Vanga from Janapada to Country, *Journal of the Varendra Research Museum* [Rajshahi, Bangladesh], XV, 103-104).

3. *History of Ancient Bengal* (Calcutta, 1971), 9.

4. *Dynastic History of Bengal* (abb. *D.H.B.*) [Dacca, 1973], 152.

5. 'Original Territory of Harikela,' *Bangladesh Lalit Kala* (abb. *B.L.K.*), vol I. pt.2 (July, 1975), 116.

6. *Ibid.*, 118. The Pascimbhag Copper Plate Inscription of 5th regnal year of Sri Candra (Sircar, *Epigraphic Discoveries in East Pakistan* [Calcutta., 1973] (abb. *E.D.E.P.*) clearly proves that Snhatta-Sylhet formed part of the Candra Kingdom under Sri Candra, prior to him, no other Candra king has left any epigraphic record in his or is even credited with its annexation by a descendant in his inscription. So Dr. Mukherjee should have had no hesitation in asserting that it was under Sri Candra that Sylhet passed under Candra rule.

7. J. Takakusu (tr.), *A Record of the Buddhist Religion as practised in India and Malay Archipelago by I-tsing*, XXXIII, XLVI and E.Chavannes, *Memoires composees a l'epoque dela grande dynasic T'ang Sur les religieux eminente qui allerent chrocher la verite cans les payo d'accident par I-tsing*, i, 44.

8. *The life of Hiuen-tsiang, Shaman Hwui-li*, 1906, XL-XLI. According to Chavannes (op. cit, 128 & n.3), the name of the king corresponds to Harsabhata but Watters pointed out that according to the ancient pronunciation of the first three syllables of the Chinese transcription, the name should better be restored as Rajabhata (*On Yuan Chwang*, II, 187). This name has been further taken to be identical with Rajarajabhata of the Khadga dynasty (N.K.Bhattacharya in E.I., 357-359 and in the *Journal of the Asiatic Society of Bengal*, New Series (abb. *J.A.S.B.*, N.S.), X, 87; R.C.Majumdar, *H.A.B.*, 78-79; A.M.Chaudhury, *D.H.B.*, 41.

9. B.N.Mukherjee, 'The Original Territory of Hankela,' *BLK* I, 2, 118.

10. *Journal of the Greater India Society*, XV (1956), 9.

11. *E.I.*, XXVI, 313-18.

12. Rampal Inscription of Sri Candra, V. 5; N.G. Majumdar, *Inscriptions of Bengal* (abb. *I.B.*), III, 7.

13. *Loc. cit.*

14. Sircar, *EDEP*, 7, 46.

15. B.N. Mukherjee, Keynote Address, p.5 of Cyclostyled Copy, Seminar on Hankela in Early Mediaeval Times (600–1300 A.D.).

16. P.L. Paul, *E.H.B.*, I, Calcutta, 1939, Xii–iv; *Indian Culture* (abb. *I.C.*, XIII, 88ff; and *Indian Historical Quarterly* (abb. *I.H.Q.*), XX (1944, 6–7).

17. Keynote Address, p.3 of Cyclostyled copy, Seminar on Hankela in Early Medieval Times (600–1300 A.D.)

18. *Ibid.*, p. 3; *B.L.K.*, I₂, 118.

19. *Bhumikanda*, V. 957.

20. R.C.Majumdar, *E.I.*, XXVI, 313–18.

21. *Banglar Itihas Sultani Amal* (in Bengali) [Dacca, 1977], 48.

22. Amgachi Copper Plate Inscription of Vighrahapala refers to the eastern part of the country as full of water (*desc. praci-pracura payasi*, Aksaya Kumar Maitreya, *Gaudalekhamala*, 125). Such toponyms as navyakhanda (Sahitya Parisat Plate, 1.47, Majumdar, *I.B.*, III, 146); Navyamandala (Rampal Copper Plate of Sri Candra, Majumdar, *I.B.*, III, 5). Navyavakasika (Lit. situated on the opening of a navigable canal; Fandpur Copper Plate of Dharmaditya, Sircar, *Select Inscriptions* (abb. *S.I.*), I, 367), Khadivisaya (district full of creeks to indicate the Sundarban regions of Lower Bengal, Barrackpore C.P. of Vijayasena, Majumdar, *I.B.*, III, 63) etc. so significant in this respect. Inscriptions also refer to water-logged land (*jola*) and marshy waterland (*hajjika-khila-bhumi*, Gunaighar Copper Plate of Vainyagupta, Sircar, *S.I.*, I. 344–345), marshes (villa), Kallan Copper Plate of Sridhar a rana rata, Sircar, *I.H.Q.* XXIII, 221 ff.

23. Gunaighar C.P., Sircar, *S.I.*, X. 341.

24. mod.Bengali *naudada*, Kailan C.P., Sircar, *I.H.Q.*, XXIII, 221ff.

25. Faridpur C.P. of year 3 of Dharmaditya, Sircar, *S.I.*, I, 366–67. The interpretation has been offered by Hoernle and Pargiter. cf. Sircar, *S.I.*, I, 366, n. 21.

26. (i) *naubhir* = *apanimitabhir* = *uparacita-kula*, Sircar, *I.H.Q.*, XXIII, 221ff.

(ii) *Ksirodhamanu devapurvata iti srinattadotat puram yatrāgantujanasya Vismaya-rasah Kamboja-varṭtadbhutaiah/lalambi-Vanamatra navika-sataranvisya siddhaksadhi-Vyahara iti ha srutassamata-tannirjitya yatsainikaih* v.7. Sircar, *E.D.E.P.*, 65.

27. *E.I.*, XIX, 277ff.

28. Waters, *On Yuan Chwang*, II, 186. The antiquity of this route cannot be ascertained. In 126 B.C. the Chinese envoy Chang Kien reported the presence of Chinese bamboo and silk goods in Bactria-Afghanistan transported from S.E. China through Yunan, Szechuan, Upper Burma, Manipur and Kamarupa. It is, however, too hazardous to state that Chinese silk reached the port of Ganges along this route via Kamarupa in the time of the *Periplus* (Cf. N.R. Ray, *Bangalir Itihasa* [in Bengali], I, 123). Indeed the *Periplus* does not refer explicitly to the export of Chinese Silk or for the matter of that any silk from the port of Ganges nor does it mention the Kamarupa territory. What the *Periplus* actually states is that raw silk, silk yarn and silk from thinner cloth were brought to Barygaza from where these were exported by way of the Ganges. This latter assertion is not very clear. It may, however, be stated that the *Periplus* refers to the export of Himalayan spikenard and malabathrum from the Port of Ganges which fact in turn proves the existence of a Himalayan route extending upto the Ganga port.

29. Details of the political relations between Harikela and Kamarupa have been omitted from the present study.

30. "Yet *sainyaih*

Lobityasya-Vanasthali-parisarah kalaguru-syamalah", V. 12. Sircar, *E.D.E.P.*, 65.

31. *Kitab al-masalik Wa'l-mamalik* (ed. de Goejo, Leiden, 1889) : Elliot and Dowson, *History of India as Told by Her Own Historians*, Vol.I, 16.

32. *Kitab nuzhat al-mushtak fi ikhtirak al-afak*; translation in Elliot and Dowson, *op. cit.*, I, 90.

33. A.H. Dani, "Early Muslim Contacts with Bengal", *The Proceedings of the All Pakistan History Conference*, 1st Session (1951), 190.

34. Watters, *On Yuan Chwang*, II, 186-9.

35. *ibid.*

36. This identification is possible only by substituting south-east for the pilgrims' north-east which is the reading of all the texts of the life and of the Fang-Chih. Waters concludes: "For this reason and because Prome is far from the sea, the identification cannot be accepted. Sri-ksetra according to the pilgrim's information should correspond roughly to Trippera district." (*op. cit.*, pp. 188-89). N.K. Bhattasali accepts the amendment and thinks that if one moves from Comilla in the direction of south-east to the borders of the ocean, one arrives at a port at present called Chatteragram (Chittagong). The ancient name of the port which is still current is Chattala. Bhattasali thinks that Hiuen-Tsang's Shi-hi-cha-ta-lo

conforms better to Chattala (*E.I.*, XVII, 354). Acceptance of Bhattasali's view regarding the location of Shi-hi-cha-ta-lo renders the identification of the other states like To-lo-po-li and I-shang-na-po-lo-lo all the more difficult. But since these identifications have been established beyond doubt, Bhattasali's hypothesis has to be discarded.

37. Yen-no-na-chou has been restored as Yamano-dvipa by Watters (*op. cit.* II, 189), but he observes that no satisfactory identification has been proposed. It is evidently a variant of Yamadvipa mentioned in *Vayu Purana*, Ch. 48. Yamadvipa has been taken as yet another variant of Yavadvipa (Wheatley, *The Golden Khorosene, Kuala Lumpur* [1961], 177) and may or may not signify Java.

38. P. Polliot, *Dour itineraries etc.*, *Bulletin de L'Ecole Française d'Exterme-Orient* (abb. B.E.F.E.O.), IV, 131, 142-43; R.C. Majumdar, *Champa*, XXII).

39. "Yat sainyaih kila Kamarupa-vijaya rohat-kapoto-ghane nivistah bha (sic. pha) lapaka-pinga-kadali-kunja-bhramad-vanarah romanthalasava (sic. ba) ddharanidra-camari-samsevit-prantara lohityasya Vanasthali-parisarah kalaguru-syamlah, v.12. Sircar, *E.D.E.P.*, 65.

40. *Tabaqat-i-Nasiri, History of India as Told by Its Own Historian*, 2nd Edn., Raverty, 309-3.

41. "Saka 1127, sake turaga yugmose madhumasatrayodaso kamaruper somagatya turuskah Ksayamayayuh," P.N.Bhattacharya, *Kamarupa-Sasanavali*, Introduction, p. 44 (in Bengali); See also N.K.Bhattasali, Muhammad Bakhtyar's Expedition to Tibet, *I.H.Q.*, IX, 49-62 and A.M.Chaudhuri, *D.H.B.*, 172.

42. "Candranamiha rohitagi (ri) bhujamansa". Rampal C.P. inscription of Sri Candra, V-2, Majumdar, *I.B.*, III, 4.

43. *I.H.Q.*, II, 317-18, 325-27, 655-56; III., 217, 418.

44. *H.A.B.*, 214, N-4.

45. *Bharatavarsa*, Jyaistha, 1348 (Bengali era), 768.

46. D.C.Sircar, *E.D.E.P.*, 65: V.7.

47. *I.H.Q.*, II, 526-27.

48. "Santosam ranadovatangamayata viravadanaimni joi runmrstam Yama(sic. va) ni-payodhara-tate patranguli-mandanam sokaprachanna-jarjjaram viracitam huni-Kapolodaram Yenonmulitamutkali-nayana-yostalesuraghumnitam", V. 14. Pascimbhag C.P. inscription of Yr. 5 of Sri Candra, *loc. cit.*, 66.

49. "L.Ganga-ksalika-papapanko-visadum tomotya Varauasim sasnau ca

*pradadou on kosamkhilam dharmanurago nrpah "17" sukham snatva krtva krtva
tadanu pitr-santarppano-vidhim vidhijnah sambhede svaci-payasi Ganga-Yamunayoh/
dvijanantarsarttim dhanna (sic. na)-konako dhira vitaranan mahabhrtah
so bhucchamayitumalam bhismo-caritah "18" – Mainamati Copper Plate inscription
(No. 1) of Yr. 6 of Ladaha Candra, vv.17–18, D.C. Sircar, *E.D.E.P.*, 72–73.*

50. *E.I.*, XVIII, 108.

51. Act I. "*Jna jau juvvadisamga nabhumga
campa campā-akhnnaura Radhani
jjidradhacamgattana vikkamakkanta
kamaruva Harikeli keliyara.*"

52. Kelawadi inscription, d. A.D. 1053, *E.I.*, IV. 261, 262, I. 8.

53. Devangere Taluq Inscription Nos. 2, 3, *Epigraphia Carnatica*, XI.

54. St. VIII, Goharwa Plates of Karnadeva, *E.I.*, XI, 142.

55. "*.....vindhyasya pyadhumeekhala-vanatalem pitva surunga-nadih/jeturyasya
va (sic. ba) lairvyagahi malayah srngopala proksalatkvai (sic. va)
ri-jala-vane-jarjjaro-vyamis'ra-kolahalaih*"—Pascimbhag C.P. Inscription of Yr. 5
of Sn Candra, V.8. D.C. Sircar, *E.D.E.P.*, 65.

56. E. Hultzsch, *E.I.*, IX, 229–233.

57. V.V.Mirashi, *E.I.*, XXIV, 105ff.

58. *Loc. cit.*

59. According to Ptolemy, Tamalites/Tamralipti was located on the Ganges itself. According to Fa-hsien, it was a sea-port, while Hiuen-Tsang describes it as situated on 'an inlet of the sea'.

Dr. N.R.Ray thinks that it actually stood on a branch of the Ganges which in the 16th century flowed along the present course of the Rupnarayan at a point not far from the Sea-mouth. In the 17th century the city no longer stood on the Ganges and the river flowing by it has been called Tamalee, Tamlerice, Tumbaleo, Tumborleen etc. In the following century in Rennoll's map for the first time the river flowing by Tamluk is shown as Rupnarayan. Dr. Ray believes that the main course of the Ganges-Bhagirathi "was slowly, steadily but surely moving towards the east, more particularly in the lowermost reaches of the river, where in the deltaic sough of the new alluvium the ground was soft and yielding." His second hypothesis is that as the Ganga-Bhagirathi had been slowly moving her bed eastwards, in her lowermost reaches at any rate, the rivers which issued out of the non-glacial Chhotanagpur hills and flowed into the Bhagirathi, tended to be longer and longer

so as to enable them to disgorge themselves into the same river itself." These changes have been apparent during the last three centuries but Dr. Ray thinks that similar geo-ecological changes must have been responsible for the decay of Tamralipti one thousand years ago (cf. Tamralipta and Ganga—Two port-cities of Ancient Bengal and Connected Considerations, *Geographical Review of India*, vol 41 pt.31, 218–20).

60. st. IV, Kielhorn, E.I., II, No.27, 345. R.S.Sharma, *Indian Feudalism*, 33.

61. *Bangalir Itihas* (Saksarata Ed., Calcutta, 1950), I. 1.497.

62. *loc. cit.*

63. Schoff, *The Periplus of the Erythraean Sea*, Section 63. According to Schoff Ganges was identical with Tamalites (*The Periplus of the Erythraean Sea*, tr., 255). But on the evidence of Ptolemy who mentions both Tamalites ($143^{\circ} 30'$, $24^{\circ} 30'$) and Gange (146° , $19^{\circ} 15'$) this view cannot be upheld. Dr. H.C.Raichaudhun maintains that Ganges was the chief city of the Gangetic delta and a great market town on the Ganges but does not suggest any precise modern identification. Dr. B.C.Sen thinks that it was situated on the river Hoogly (*Some Historical Aspects of the Inscriptions of Bengal* [Calcutta, 1942], 28), while Dr. D.C.Sircar likes to place it at the junction of the Ganga and the Sagara (*Studies in the Geography of Ancient and Medieval India* [Delhi, 1960], 140).

64. L. Renou, *Ptolemy*, VII, I, 35.

65. N.R. Ray, Tamralipta and Gange—Two Port-cities of Ancient Bengal, etc., *loc. cit.*, p. 207.

66. *Bangalar Itihas*, I, 210.

67. *ibid.*, I. 200.

68. Ptolemy's Takola and Talaitakkolam of the Tanjore Rajarajesvara temple inscription of Rajendra Cola are no doubt variants of Takkola, Identification of the place will be given later.

69. "Yatha maharaja sadhano naviko pattane sutthu katasunko mahasamuddam pavisitva Vangam Takkolam Cinam Soviram Surattham Alasandam Kolapattanam Suvannabhumi gacchatu annam pi yam konci navasannaranam" — Quoted in Sylvain Levi, Ptolemie, Le Niddesa et la *Brhatkatha Etudes Asiatiques*, II, 1–2.

70. See n. 8 above.

71. Samuel Beal, *The Life of Hiuen Tsang* (London, 1911), XXXIX.

72. See note 7 above.

73. I-tsing, *A Record of the Buddhist Religion*, tr. J. Takakusu (London, 1896), XXXI.

74. According to al-Idrisi the distance was about 30 miles. Neither of these statements is correct.

M.H. Nainar's identification of the place with Kanoi (*Arab Geographers' Knowledge of Southern India*, 49, n. 79) has been rightly rejected by A.H. Dani according to whom the name corresponds with Ganjam (Early Muslim contact with Bengal, *Proceedings of the All Pakistan History Conference*, 1st Session (Karachi, 1951), 192.

75. Nainar has taken as to mean that the city of Samandar was situated on a *khwar* (inlet) [*loc. cit.*]

76. Elliot and Dowson, *History of India as Told by Its Own Historians*, I, 90-91.

77. Early Muslim Contact with Bengal, *loc. cit.*

78. *Banglar Itihas, Sultani Amal* (in Bengali), (Dacca, 1973), 48.

79. The name Samandar may appear as a popular deformation of Skt. *Samudra* = sea. The city could have been asserted that the correct form of the toponym is *samandarun*, 'fire within'. The *Pagsom Jon-Zen* of Sumpa Khan — *po and Kahbab Dun Dan* of Lama Taranatha informs us that there was in Catigrama a *jalandhara* in which "flames of fire appeared mixed up with water" (S.C.Das, *Journal of the Asiatic Society of Bengal* [1898], 22). On the basis of this information Dr. Karim believes that probably the original name of Jalandhara was changed into Samandar by the Arab geographers (Samandar for the Arab Geographers, *Journal of the Asiatic Society of Pakistan*, VIII, 2).

80. Schoff, *The Periplus of the Erythraean Sea* (Tr.), Sec. 63, 47-48.

81. *Science and Culture*, VII, 236-238.

82. C. Defremery and B.R. Sanguinetti, *Les Voyages d'Ibn Batouta*, IV, 212; Ch. IX, 271.

83. cf. Bernonville, *Description historique et géographique de l'Inde* (1786). It is for the first time in Abul Fazi's *Ain-i-Akbar* (tr. Jarrett and Sarkar, II, 133) that Chittagong has been called as situated on the Padmavati i.e. the Padma, the name which the south-eastern course of the Ganges assumes from the place of its bifurcation at Kazihate, near Rajmahal.

The derivation of the name Chittagong from *tsat-Qa-going* (i.e. to make war is improper), the name of the place where, according to the *Radga-wong* the Arakan king Tsu-lo-taing Tsen da-ya erected the victory-pillar, is fanciful.

84. *Ch'ien Han Shu*, Ch. 28, pt 2, f.32 *recto et verso*

85. K.A. Nilakanta Sastri (ed.), *A Comprehensive History of India*, II, 77

86. Ch. 54, f. 22 verso; Wheatley, *The Golden Khorsone* (Kuala Lumpur, 1961), 24.

87. Chap. 1, f. 12 verso; Wheatley, *loc. cit.*

88. Mison Inscription, *B.E.F.E.O.*, IV, 922f. =depigraphic, 130; "asitrah svair gunair Gangaraja iti snito rupaguna prakryata viryya sautih, rajyam dustya (jam).....pragrat Gangadarsanajam sukham mahad iti prayad ato jahnavim."

89. In our earlier study entitled *Social Economy of Ancient Rural Bengal* (Seminar on Bengal Inscriptions, Epigraphical Society of India) we stated that there is no mention of the river Padma in the whole gamut of early Bengal inscriptions. The statement required some modification. The Idilpur C.P. inscription of Sri Candra records the gift of certain lands at the village called Leliya in sub-division (mandala) called Kumara-talaka situated in the district (visaya) of Satata-Padmavati. This latter name literally means with bank Padma-house. G.M.Laskar, the editor of the inscription thinks that it signified a district on the banks of the Padma (quoted in N.K. Bhattasali's Introduction to the Kedarpur C.P. of Sri Candra, E.I, XVII, 189).

90. Samuel Beal, *The Life of Hiuen Tsang* (tr. London, 1911),

91. I-tsing, *A Record of the Buddhist Religion* (Tr. Takakusa, Oxford, 1896), XLVI.

92. Takakusu, *ibid.*, XXXI.

93. Soviet Sinologist V. Velgus has offered a highly modified translation of the above passage. According to him, no Chinese imperial envoy came to Huang-Chih (Some Problems of the History of the History of Navigation in the Indian and Pacific Oceans, *The Countries and Peoples of the East* (Moscow, 1974), 50-52.

94. *East and West*, N.S., XVII, 3-4, 295ff.

95. The Nan-hai Trade, *Journal of the Malayan Branch of the Royal Asiatic Society* (abb. J.M.B.R.A.S.), XXXII, '2', 22; Wheatley, *The Golden Khorsones* (Kuala Lumpur, 1961), 10.

96. Lo Kouen-Louen, *Journal Asiatique* (Ile serie), XIII, '1' 451-457; XIV '2' 45-46.

97. *loc. cit.*, 22.

98. e.g.J.C. Lamster: near the Karimata Strait to the South of Western Indonesia, *Tijdschrift van het Bataviassch Genootschapp van kunsten en Waten schappen*, XLV, 991-98; Duyvedak, P'i-sung island of the *Wu-pai-chih* chart and located off the South-west coast of Johore (*China's Discovery of Africa* [London, 1949], 9-11); Wheatley; P'i-sung of the *Sui-shu* and situated most probably

in the Malay Peninsula or a neighbouring island (*The Golden Kharsonese*: 12); Petech notes the phonetic similarity between p'i-sung and the Malay word *pisang* which is appended to the names of several islands of the Malay Archipelago (loc.cit., 300).

99. *Early Indonesian Commerce* (abb. E.I.C., Ithaca, 1967), 268, n. 19.

100. Leang Shu, ch. 54, f. 10, *recte*, trans. by Wang Gungwu, loc. cit., 33 and 33n, 10.

101. *Etudes Asiatiques*, II, 26.

102. *Towards Angkor*, 47. He gave up this view later on (*J.M.B.R.A.S.*, xxiii, [1950], 152-3).

103. Notes on Ancient Times in Malaya: (4) Takola and Kataha, *JMBRAS*, vol. XXII, pt. '1' (1949), 1-16.

104. Wheatley, *op.cit.*, 19 quotes *Lo-yang Chieh-Lan-Chi* Ch. I, f. 18 regarding the location of kou-Chih (=Chu-Chih), 25; Wolters, *op. cit.*, 47.

105. The Nan-hai trade, loc.cit., 41, n. 43 where Wang Gungwu opines that at Coli ships awaited the change of monsoons which fact would in his opinion explain the inordinately long period of time of more than one year - to cover from Funan to the mouth of the Ganges. For a different explanation see the next note.

106. Wolters further thinks that "the envoy's trading ship must have visited them, which would explain why the journey to the Ganges took rather more than a year" (*E.I.C.*, 47).

107. *Kao Song Fa hsian Chuan*, Taisho Tripitoka, Li, No. 2085, f. 8666 *Rectet verso*, Giles, *travels*, 2nd impression, 79.

108. B.C. Chhabra, Expansion of Indo-Aryan Culture during the Pallava Rule as evidenced by Inscription, *J.A.S.B.L.*, I (1935), Pt. 1, 17-18. The expression *siddhayat* or *siddhayatra* occurs in at least seven inscriptions which in themselves attest to the prevalence of sea-voyages. To take a few examples, the word *siddhayatra* is mentioned twice in the Kedukan Bukit inscription from Palmbang (A.D. 662, J.G. di Casparis *Prasasti Indonesian* II 12-13) to with a successful naval expedition by Sn Vijaya and its flourishing condition (*Srivijaya siddhayatra subhiksa*). In the kota Kaapur inscription (c. A.D. 686) erected on the island of Banka also occurs the expression *Srivijaya-siddhatsa* inscriptions malaises de Srivijaya, *B.E.F.E.O.*, XXX[1930], 29-80). In the *Pancatantra* and the Jataka literature also occur such expressions of *siddhantrika*, *siddhayatratva* and *vatrassiddhikama* in connexion with voyages some of which were undertaken towards the Suvamabhumi or Suvamadvipa. According to Dr Chhabra *siddhayatra/yatra* signifies acquisition of some magic power, (*loc.cit.*, 29).

109. *Bangalar Itihas*, I, 127, 129.
110. cf. S.R. Das, Rajbandanga (Excavation Report), Calcutta, 1968. A clay seal found at Rajbadidanga bears the inscription: "*Sriraktamrtika-mahavaihariraryabhiksu-sanghasya*".
111. *History of Bengal* (Dacca University), I, 194.
112. See *supra* n. 47.
113. *Ch'ih-tu-Kuo-chi*, *Hsin T'ang-shu*, ch. 58, f.19, *recto*; *Sui-shu*, ch. 82, ff.3 *recto*-5 *verso*; Wheatley, *op. cit.*, 26-27, 32-33.
114. I-tsing, *A Record of the Buddhist Religion*, etc. (Tr. J.Takakusa), XXXIII-XXXIV, XLVI.
- 114A. See also n. 191b below.
115. M.H.Mainar, *Arab Geographers' Knowledge of Southern India*, (Madras, 1942), 52.
116. *Studies in Indo-Muslim History* (Bombay, 1939), 18.
- 116a. Elliot and Dowson, *H.I.*, I, 15-16.
117. *mod.* Saymur according to Nainar, *op. cit.*, 52.
118. Sanji of al-Idrisi (*Kitab muzhat al-mushtak fi ikhtirak al-afak*), Elliot and Dowson, *H.I.*, I, 90.
119. Kaikasar of al-Idrisi, *ibid.*
120. de goeje, *Kitab al-masalik wa'l-mamalik*, liber viarum et regnorum, auctore Abul-Kasim (Obaidalla ibn 'Abdallah ibn Khordadah, Leiden) 1889, 63, n.1.
121. Chilka lake or better the ancient port-town of Kalingapattanam, since according to al-Idrisi the river Musala falls into the sea after passing through it. Dani (*loc. cit.*, 192), however, is inclined to locate it in West Bengal, possibly near Tamralipti.
122. *mod.* Kancipuram (Nainar, *op. cit.*, 49, n. 79). The improbability of this identification has been pointed out by Dani (*loc. cit.*, 192). It is not difficult to recognize the name as Ganjam in Orissa.
123. The identification of Samandar has been discussed above.
124. Vanants Oransin, Oransir, Orasir.
125. *op. cit.*, 85, n. 188.
126. Dani, *loc. cit.*, 192; Phayre, *History of Burma*, 41-42.

127. cf. in the ninefold division of Bharatavarsha of Garuḍa p., Ch. 55, 5 ["*Nagadvipah kata s'ca simhalovarunastatha*"] and in *Vamna Purana*, Ch. 13, 10–11, Nagadvipah is placed immediately before Kataha (= Kedah) in Malay Peninsula. According to Ceylonese tradition Nagadvipah forms parts of Ceylon (cf. The *Dipavamsa*, Ch. IX. 13 (B.C. Law, *The Ceylon Historical journals*, VII, 1–4, 61).
128. *Murug al-Dhahabi*, translation quoted in Wheatley, *op. cit.*, 218–19.
129. Sauvaget, *Relation de la Chine et de l'Inde* (Paris, 1948), 69.
130. Travels, ch. IX, 271;
131. There are three accounts of these voyages. Ying Yai Sheng Lan (1425–1432) was completed by Ma-huan Sing ch'shang Lan (1436) by Fei-Sin; Phillips, Ma-huan's Account of the kingdom of Bengal, *Journal of the Royal Asiatic Society* (1895) and (iii) Asi-Yang Fan-kuo Chih by Kung-chen (untranslated), 523–535. P. Pelliot, Les-grans voyages mentions Chinois debut de XV siecle, *Toung P'ao (T.P.)*, XXX (1933), 237–452. Notes additionnelles sur Tchang Hono et sur ses voyages, *T.P.* XXXI (1935), 274–314, Enco a propos des voyages de Tcheng Houo, *T.P.*, XXXII (1936), 210–22.
132. Tibbetts, The Malay Peninsula as known to the Arab Geographers, *Malayan Journal of Tropical Geography*, VIII (1952), 54, n.5.
133. From *al-'Umdat al-Mahriyah fi dabt al-'Ulum al-Najamiyah* (MS. 2559), quoted in Wheatley, *op. cit.*, 234.
134. A fuller account of these political contacts has been excluded from the scope of this study.
135. Ch. 28, pt. 2, folio 32 *recto* et *verso*. The translation is given after Wheatley, *op. cit.*, 8–9.
136. Section 63, Schoff, *op. cit.*, 47.
137. Wheatley, *op. cit.*, 11.
138. Eliot and Dowson, *History of India as Told by Its own Historians*, I, 5; Sauvaget, *op. cit.*
139. Syed Sulaiman Nadvi, *Arab-o-Hind ke Taluqat*, 78.
140. Section 63, Schoff, *op. cit.*, 47.
141. *ibid.*
142. Section 64, *ibid.*, 48.
143. Section 63, *ibid.*, 48.
144. *Hou Han-Shu*, Ch. 118, 10 *recto* and 8 *verso*–9 *recto*; Wang Gungwu, *loc. cit.*, 28.

145. Ptolemy (A.D. 150) refers to a place ($136^{\circ} 20'$, $11^{\circ} 20'$) situated between the market town of Alosygni (135° , $11^{\circ} 20'$) and the capital city of Paloura ($136^{\circ} 20'$, 11° = Dantapura = modern Danton in Midnapur district of West Bengal?) as the point of departure (*aphetorion*) for sailing to the Golden Khorsonose (Suvamadvipa *Suvarṇabhūmi*).

146. *Leang-Shu*, ch. 54, folio 4 verso, 10 recto ; P. Pelliot, *Le Founan*, B.E.F.E.O., III, 303.

147. Wang Gungwu, *loc. cit.*, 31.

148. *loc. cit.*, 40.

149. From the Allahabad Pillar inscription (Fleet, *Corpus Inscriptionum Indicarum* (III, 8), it is known that Samatata, Dabaka (Valley of the Kapili-Yamuna-Kolang rivers, K.L.Barua, *Early History of Kamarupa*, 42n), and Kamarupa constituted the *Pratyanta* (frontier) states of the empire of Samudragupta. The Tiger-slayer type of coins of Samudragupta and Kumaragupta which portray the Goddess Ganga riding a makara on the reverse has been taken by many numismatists as an allusion to the extension of Gupta rule over Lower and S.E.Bengal (Chhanda Mukhopadhyay, Goddess Ganga on Gupta Coins, *Journal of the Numismatic Society of India*, XLIV, '1 & 2' 150). The Gunaighar inscription of Vainya Gupta of G.E.188 (= A.D. 507) shows that at a later date Gupta rule extended upto Tippera district.

150. The identification of P'o-li with Bali is controversial. The confusion in identification is rendered all the greater by the epithet T'ien-chu attached to it (*Sung-Shu*, ch-97, f. 5 recto).

151. *Liang-Shu*, ch. 5, f. 3 verso.

152. It has been supposed to have been situated in India (Pelliot, *Deux Itinéraires etc.*, B.E.F.E.O., IV, 361.

153. cf. Pelliot, *op. cit.*, 361 Kan-chi-fe is evidently Kancipura but the identification of the two other cannot be ascertained.

154. *ibid.*

155. Y Euei, 100, 1782. Wang Gungwu, *loc. cit.*, 123.

156. Pascimbhag C.P. inscription of year 5 of Śn Candra, vv. 7-8, and 12-14; Sircar, *E.D.*, 65-66.

157. For reasons of space and expediency a detailed study of the political relations of Harikela-Samatata-Vanga with outside countries cannot be made in the present study.

158. As to the king against whom the expedition was undertaken, Munshi Abdul Karim and Dr. Enamul Haque think that Thuratan signifies Sultan which in turn would indicate Muslim rule over this part of the country in the 10th century A.D. [*Arakan Raj Sabhay Bangla Sahitya* (in bengali), 3]. This is very unlikely. Indeed Thuratan in the context it is used not denote a person but is the name of a locality.

Again, N.K. Bhattasali has also no reason to think that Mataing Tsan-da-ya was the Candra King Laya (sic. da) ha Candra [*J.A.S.B.*, N.S. (1914), 90].

159. This is not the place to enter into the controversy as to the nationality and identity of the *po-ta*, *Kun-lun-p'o-ta* and *po-sse ships*. For a resume and present position of the controversy Wang Gungwu, the *Nan-hai Trade*, *loc. cit.*, 57-61 and Walters, *E.I.C.*, 129-158. If the *p'o-ta*, *Kun-lun-p'o-ta*, etc. had anything to do with *colandia* vessels mentioned in the *Periplus*, those may refer to Kolantarapota, i.e., ships used in making other shore i.e. long distance voyages and for which the Ganga port of S.E.Bengal was an important starting point.

160. e.g., Candi Kalasan and Candi Keluak inscriptions of Java and about a dozen digraphic inscriptions of Yasovarmā (A.D.889-900) of Cambodia (Bergaigne, *Inscriptions Sanskrites de Campa et du Cambodge*, 346ff.).

160a. T'ang shu, ch. 222 C. f. 3 *verse*; Wang Gungwu, *loc. cit.*, 79. Canton could not fully recover from this shock but in A.D. 878 with burning and pillaging of Canton and murder of foreign merchants by Huan Chao (Chin Tang Shu, Ch. 225c, ff. 1 *recto*-8 *recto* 19B, 4 *recto*-17 *verse* and T'ang Shu, ch. 9, ff. 4 *recto*-9 *recto*) began a dismal period for Canton and nan-hai trade which continued till 960 (Wang Gungwu, *loc. cit.*, 84).

161. Nalanda Grant of Devapala of year 39, *E.I.*, XVII, 318ff.

162. The Larger Leyden Grant, *E.I.*, XXII, 228-30. For the date of the foundation of K.A.N. Sastri, *History of Sri Vijaya*, 76.

163. V. 48, *Annual Report of Indian Epigraphy* (1949-50), 4; R.C. Majumdar, The overseas Expeditions of King Rajendra Cola, *Artibus Asiae*, XXX (1964), 3-4, 341.

164. The Prasat Ben inscription of S.D. 1007 tends to show the Khmer ruler's control over Ligor (Coedes, *Inscriptions du Cambodge*, VII, 184-189).

165. K.A.N. Sastri, *The Colas*, II, 249; *LHQ* XIII, 151-52; and Hultzsch, Terumalai Inscriptions *E.I.*, IX, 229-33.

166. Tanjore Rajarajesvara Temple Inscription, K.A.N. Sastri, *The Colas*, I, 254-55; and *B.E.F.E.O.*, XL (1940), 286. The date of the expedition is generally

believed to be c. A.D. 1026, but the Tiruvalangadu Plates dated in the 5th regnal year of Rajendra (i. e. A.D. 1017) mentioning expedition to Bengal (cf. Dr. R.C. Majumdar, *The Overseas expeditions of King Rajendra Cola*, *loc. cit.*, 341).

167. Pattikera sprang up in the vicinity of Devaparvata. It is mentioned for the first time in the Mainamati C.P. inscription of the 6th year of Ladaha Candra (Sircar, *E.D.E.P.*, 76). In the course of time it developed into a capital city adorned with forts and monasteries (*durgottara-vihari-rucira-viracita*, Mainamati C.P. inscription of Ranavankamalla Harikeladeva of A.D. 1219–1220, D.C. Bhattacharya, *I. H. Q.*, IX, 282ff.). The *Glass Palace Chronicle* of the Pagan kings (trs. by P.E. Maung Tin and G.H. Luce, Rangoon, 1960) mentions it as Patcikkaya, while the translations of the text restored the name as Patikara (*ibid.*: 127). Coedes accepts this restoration (*Les Etats hindouises d'Indochina et d'Indonesie* [Paris, 1964], 305, n. 5). This form of the name is actually found in the local history of Tippera, *Rajamala* (4–6). The eight coins found from Sylhet which McDowell reads *varikriya* (*Numismatic Chronicle and Journal of the Royal Numismatic Society*, Sixth Series, XX [1960], 229–33) has been read by Dani as Parkarta which he thinks was a mistake for Patikara (*Journal of the Numismatic Society of India*, XXXV, 141). Indeed coins bearing clearly the legend Pattikera have been found (*ibid.*, 141–42).

The translators of the *Glass Palace Chronicle* reject the view according to which Pattekkaya was to the north-west of Arakan and west of the hills which form the western boundary of Burma. N.D. Bhattacharya is inclined to identify it with Kotamuri remains at Mainamati. The name has its echo in the modern Patikara pargana of Comilla district.

168. *op. cit.*, 95–96.

169. Gerini, *Researches in the Geography of Ptolemy in S.E. Asia* (1909). 740.

170. cf. B.N. Mukherjee, The Coin-legend of Harikela, *Journal of Asiatic Society* (1976), 1–4, 99; *Monthly Bulletin of the Asiatic Society* V (1976), 5; B.H. Johnston, Some Sanskrit Inscriptions of Arakan, *Bulletin of the School of Oriental and African Studies* XI (1943–46), 357ff., & pl. IV, fig. 2.

171. B.N. Mukherjee, Harikela and related Coinages, *Journal of Ancient Indian History*, X (1976–77), 168.

172. See 167 above.

173. B.N. Mukherjee, Harikela and Related Coinages, *loc. cit.*, A new variety of Coinage from Harikela, *Journal of the Asiatic Society*, XXI (1979), 46–47;

Coinages of Harikela paper read at the Seminar on Harikela in Early Mediaeval Times (A.D. 600–1300).

174. Johnston, *loc. cit.*, 378, 382.

175. This would go a long way to explain the total absence of coins of the Pala and Sena rulers.

176. *Chin T'eng-Shu*, Ch. 198, f. 14 verso; *Tang-shu*, 222c, f.3 verso; *Tang-shu*, ch. 9, ff.4 recto–9 recto; Wang Gungwu, *The Nan-hai Trade*, *loc. cit.* 79.

177. With the resumption of the Nan-hai trade and its extension under Chinese official patronage in the Bay of Bengal and the Indian Deccan from the middle of the 12th century A.D., the supply of silver in South East Bengal also increased, so much so that in A.D. 1512 Tome Pires noted that the price of silver was one-sixth or one-fifth less than the price prevailing in Malacca.

178. K.N.Dikshit, *Memoirs of the Archaeological Survey of India*, No.5 87.

179. F.A.Khan, *Mainamati* (Decca, 1963), 27.

180. *ibid.*

181. D.C.Sircar, *E.D.E.P.* 51.

182. See n. 49, Also, *Mainamati* copper plate inscription of the year Govinda Candra, V.9; Sircar, *ibid.*, 78.

183. cf. "volayam daksinabdhher musaladhare-gedapani-samvasavedyam ksetre visvesvarasya sphuradasi-varanas'lesagangommibhaji /tarotsanke trivenyah kamalabhavamakharambha-nyadhay" —V.XIII ; N.G.Majumdar, I.B., III, 122–23.

It may be noted that what the Sena king could at the most achieve was a daring raid and not a feat of permanent annexation. Better still it would be to read into the statement of account of pilgrimage to the sacred places of Puri, Benares and Allahabad.

184. See n. 88.

185. Samuel Beal, *The Life of Hiuen Tsang* (London, 1911), XXXIX.

186. J. Takakusu, *Records of the Buddhist Religion as practised in India and Malay Archipelago by I-tsing* (Oxford, 1896), XLVI ; E.Chavannes, *Memoires ... par I-tsing*, 144).

187. See n. 8 above. It has sometimes been asserted that the coin of the time of Haroun al-Rashid found at Paharpur was actually brought by a Muslim *fakir*. Without further evidence no comment should be made on Islamic proselytism in Bengal at such an early period.

188. See *Supra*, n. 161.
- 188a. *E.I.*, XXXVIII, 65.
- 188b. F.A.Khan, *Mainamati*, 1963, 19; A.M. Choudhury, *op. cit.*, 146.
- 188c. cf. Dr. B.N.Mukherjee, Keynote Address, Seminar on Harikela, 600–1300 A.D., p. 9 (Cyclostyled Copy).
- 188d. *Report of the Archaeological Survey of Burma*, 1911, 18; 1923, 32.
189. R.G.Basak, *History of North Eastern India* (Calcutta, 1934), 227–118.
190. F.D.K. Bosch, De inscriptie Van Keloerak, *Tijdschrift van het Bataviaasch Geneetschap van Kunsten en Wetenschappen*, LXVIII, (1918), 1–56.
191. R.C.Majumdar, *History of Ancient Bengal*, 583, 600.
- 191a. Dr.D.C. Sircar has suggested different dates for the reign of Gopala II as for example (i) c. A.D. 940–960 (*Epigraphic Discoveries in East Pakistan*, f.7); (ii) c. A.D. 952–72 (*JAIH*, XIII [1980–83], 36).
- 191b. Tamradvipa signifies also Burma. cf. the coronation-titles of the kings of Pagan: (D.G.E.Hall, *A History of South East Asia*, 3rd Edn.). If Burma is actually in to here, this would mean voyages along the coast of Tinasserin instead of turning S–S.W. Kedah.
192. Sircar, *SI*, I, 374.
193. A.K. Maitreya, *Gauda Lekhamala*, 15.
194. See also nn. 42–47.
- 194a. Dr. B.C. Sen, *op. cit.*, 375; Dr. A.M. Chaudhury, *op. cit.*, 162, 165.
195. *I.B.*, III, 47 and 51; *E.I.*, I, V, II, 308, V, 312.
196. N.G. Majumdar, *I.B.*, III, 68ff.
197. R.D. Banerji, *Bangalar Itihasa* (in Bengali), I, 275–76; J.A.S.B., N.S., X, 123–24.
198. R.C.Majumdar, (ed.) *History of Bengal*, I, 199–200.
199. N.G.Majumdar, *I.B.*, II, 3ff.
- 199a. N.G.Majumdar, 1. 43; *I.B.*, III, 21.
200. *I. H. Q.* IX, 284.
201. F.A. Khan, *Mainamati*, 15, 32–33.
202. R.C. Majumdar, *History and Culture of the Indian People*, Vol. IV: *The Age of Imperial Kanauj*, 77; *Journal of the Bihar and Orissa Research Society*, VI, 238; J.A.S.B. (1909), 347; 1916, 291; *I.H.Q.*, II, 655.

203. *Journal of the Andhra Historical Research Society*, II, 146ff.

✧ 204. e.g., Malkapuram (Guntur Taluk, Andhra Pradesh) Stone Pillar Inscription, *Journal of the Andhra Historical Research Society*, IV, 158–62; B. P. Majumdar, Epigraphic Records on Migrant Brahmanas in North India, *The Indian Historical Review*, V. pt.-2, 64–86; the matter has also been discussed in some detail in our *Social and rural Economy of Ancient Bengal*, Proceedings of the Seminar on Bengal Inscriptions, Epigraphical Society of India, Calcutta, 1982.

205. "Srimata mankhadasena Su(su) bhadasasya su (sununa) idam sa (s'a)-sanam utkiman sat-Samatata janmana," I. 57, A.K. Maitreya, *Gaudakhamala*, -55ff.

✧ 206. *J.A.S.B.*, -XVII (1951), 137ff.

207. Phayre, *J.A.S.B.*, XIII (1844), 36.

208. See infra n. 212.

209. According to Manrique Ramu was the seat of the governor of the king of Arakan. The Bengal Survey Map (Sheet No. 425, 1"=1 mile) identifies Ramu with Cox's Bazar, L.S.S.O.' Malley states that it was a village and an important market in the Cox's Bazar subdivision on the continuation of the Arakan road while the map appended to his *Gazetteer of Chittagon* locates it to the east of Umkhall (Hosten quoted by R.C. Majumdar in *I.H.Q.*, XVI [1940], 232–34).

210. Madhainagar C.P. Inscription of Laksmenasena, N.G. Majumdar, *I.B.*, XI, 109–10; E.I., XXVI, 5.

211. Belava C.P. grant, V. 8; N.G. Majumdar, *I.B.*, III, 15–24; E.I., XII, 37–43; *J.A.S.B.*, N.S., X.121–29).

212. *The Glass Palace Chronicle* (trans P.D. Maung Tin and G.H. Luce) 126, 134. Hall thinks that the Indians seems to have been Sinhalese (*op. cit.*, 154). He refers to Ceylonese Chronicle *Culavamsa* which states that when the Burmese king interfered with Ceylon trade with Cambodia via Malay peninsula, seized a Ceylonese princess and put an embargo on Burma's elephant trade with Ceylon, king Parakramabahu led an expedition against Pagan and killed its king. Hall informs us further that Than Tun, an authority on early Pagan history is inclined to accept the ✧ Culavamsa account though Burmese inscriptions are completely silent about it.

213. cf. R.C. Majumdar, *History of Ancient Bengal* (Calcutta, 1971), 279.

213a. cf. R.C. Majumdar, *History of Ancient Bengal* (Calcutta, 1971), 279. cf. W.F. Stuthierheim, *A Javanese Period in Sumatra's History* (Surakarta, 1929), 9–12.

214. cf. G. Coedes, *Les états hindouises d'Indochina et d'Indonesie* (Paris, 1964), 204; K.A.N. Sastri, Sri-Vijaya, *B.E.F.E.O.*, XL (1940), 267. ✎

215. cf. "ha dhik (ka)stamaviramadya bhuvanam bhuyopi kam (sic. kim) raksasamutpato yam upasthito'stu kusali sankasu lankadhīpah". N.G. Majumdar, I.B., III, 20; R.C.Majumdar, *History of Bengal* (Dacca University), I, 203-04, n; P.L.Paul, The Varmans of Eastern Bengal, *Indian Culture*, VI, 58-59. Dr. Majumdar seems to have somewhat modified his position later. In the *History of Ancient Bengali*, (Calcutta, 1971), 218; he writes: It is difficult to explain this reference to the king of Lanka unless there was some association between the kingdom and the Varmans."

216. *D.A.B.*, 200. ✎

217. South Indians in Bengal, *Social Life in Ancient India* (ed.), 117; *Studies in Society and Administration of Ancient and Mediaeval India*, 30.

218. Cf. Talamanchi inscription of Calukya Vikramaditya I (A.D. 660) mentions a *vaidyā* who was the *uttaramantrin* (Chief Minister) (*E.I.*, IX, 101); Annamalai inscription of Velvikudi and Madras Museum records of the Pandya king Parantaka Naranjadniyank VIII, 318-19; XVII, 203-300; *Indian Antiquary*, 1893, 57ff.) etc.

219. *Studies in Society and Administration of Ancient and Mediaeval India*, 118 (with n. 2).

220. South Indians in Bengal, *Social Life in Ancient India* (ed.), 116.

221. N.K.Bhattachali, Bharellu Siva image inscription, *E.I.*, XVII, 351. ✎

222. Mainamati C.P. Inscription, I, 35; D.C. Sircar, *E. D. E. P.*, 55, 80.

223. E.H. Johnston assigns them a date around A.D. 650 (*Bulletin of the School of Oriental and African Studies*, XI, 1943-46, 358ff.), while Dr. Sircar prefers to place them in the first half of the 6th century A.D. (Three Fragmentary inscriptions from Arakan, *E.I.*, XXXII, 105).

224. See *supra*, n. 170.

225. G. Coedes, *op. cit.*, 170; F.D.K. Bosch, De inscriptie van Keloerak, *Tijd. Bat. Gen.*, LXVIII (1928), 26.

226. cf. G. Coedes, L'inscription de Vat Thipdai, *Melanges Sylvain Levi*, 213; ✎
Tuol Tn Poe inscription, *Inscriptions du Cambodge*, V, 244ff.

227. D.C. Sircar, *Journal of Ancient Indian History*, X (1976-77), 110.

228. *E.I.*, XXVIII, 220-26.

229. F.A. Khan, *Mainamati*, 11-12.

230. See *supra* , n.190.

231. G. Coedes, *Les inscriptions malaises de Sri Vijaya*, *B.E.F.E.O.*, XXX, 55-57. It may be recalled that Vajrabodhi who introduced Tantrika Buddhism in China passed through Sri Vijaya in A.D. 717 (Pelliot, *Deux itinéraires*, B.E. F. E. O., IV, 336).

232. Coedes, *Les états hindouïses* , etc. 160, n. 3.

FRONTIERS OF THE KUSHANA EMPIRE IN CENTRAL ASIA

B. N. MUKHERJEE

It is well-known that a large portion of the Kushana empire with its capital at Bactra (Balkh) was in Central Asia and Afghanistan. However, scholars are not unanimous about the limits of the Kushana domain in the territory concerned. In view of the importance of demarcating the varying northern limits for following the growth of the Kushana empire, we propose to examine in detail the relevant data and hypotheses.

In the opinion of R. Ghirshman the Kushana king Kujula Kadphises was the master of the vast territory of Margiane, described by Ptolemy, probably on the authority of Marinus of Tyre of the first quarter of the 2nd century A.D., as extending *inter alia* from Hyrcania to Bactria. Ghirshman quotes the statement of Paul Orosius that "Hyrcania is bordered by the Bactrians" in support of his hypothesis.¹

S.P. Tolstov has suggested, on the basis of his interpretations of the archaeological finds at Toprak-kala and some other sites in Khorezm (Uzbekistan), that it formed a part of the Kushana empire from about the middle or end of the 1st century A.D. to the late 2nd century A.D. This inference is based on the evidence of the alleged influence of Gandhara and other Indian styles on the sculptures and paintings at the palace at Toprak-kala, presence of Gandhara (Buddhist ?) motifs in terracotta figurines from different sites of Khorezm, association of Buddhism with several archaeological sites in that area, discovery of several copper coins of V'ima Kadphises, Kanishka I, Huviska, Vasudeva I and Vasudeva II in Khorezm, and the alleged use of the Saka Era in a few documents found at the Toprak-kala palace². R. Ghirshman thinks that Kujula conquered Khorezm or ancient Chorasmiā³.

R. Ghirshman wants to include Aria, as described by Ptolemy, within the empire of V'ima Kadphises. The evidence of the *Hou Han-shu* about the Kushana influence in the period of Yuan-ch'u (A.D. 114-116) during the reign of the emperor An suggests, according to R. Ghirshman, that the ruler of Kashgarh was a protege of V'ima Kadphises⁴.

Kashgarh, R. Ghirshman thinks, submitted also to Kanishka I and sent hostages to him. Ghirshman postulates that Khotan was controlled by Kanishka I, and considers, following a theory of S. Konow, that Vashmana and Amgoka were his vassals in Khotan and that their Kharoshti records are dated in his era⁵. Sogdiana, according to a theory of Ghirshman, was conquered by Kanishka. This hypothesis is mainly based on the discovery of a Kharoshti inscription at Termez and the alleged influence of Kushana

art on sculptures at Airtam and Termez and the evidence of the Naqsh-i-Rustam inscription of Shapur I, which includes in the Kushana country certain regions up to *inter alia* Sash (tan) or Tashkent, which had been once in Sogdiana.

Ghirshman has observed that the empire of Kanishka extended "from Merv to Khotan and to Sarnath and from the Yaxartes to the Gulf of Oman" (*sic.*)⁶. The same scholar believes that "with Kanishka and his two successors the empire attained its zenith, which was maintained not only during the reign of Huvishka, but also during the major part of that of Vasudeva"⁷.

The majority of the Russian scholars interested in Kushana studies believe that the Kushana empire under Kanishka reached the Aral Sea, and included Khorezm and incorporated a substantial portion of territory to the north-east of the Oxus like Soghd, Chach, Ferghana, etc.⁸ M.E. Masson, another Russian scholar, however thinks that such views on the extension of the Kushana empire to the north of the Oxus are "exaggerated conjectures"⁹. He infers from the limits of Tokharistan in early mediaeval ages and findspots of a great number of archaeological objects betraying influence of the Kushana empire, that within its northern limits was the territory situated along the right bank of the Oxus or the Amu Darya and extending up to the Pamir region, the Hissar ridge and Baisun mountains. The Kushanas owned "the lower reaches of the Kashka Darya river valley". From there the border turned south-west and then passed along the Amu Darya, including Amu (Old Chardjou) and Kabaklin Tugai, bordering on Khorezm.¹⁰

The Indian Kushanologists have not generally taken into account the question of determining the extent of Kushana rule in Central Asia. However, D.C. Sircar, who discussed the problem, did not believe that there was any proof of the rule of the Imperial Kushanas over a territory to the north of the Oxus.¹¹

The divergent theories, some of them being diagonally opposite to one another, have made the position worst confounded. An analytical study of relevant sources is therefore necessary for solving the riddle.

According to Ch'ang Ch'ien, "the great Yueh-chih live some two or three thousand li west of Ta-Yuan, north of the Kuei river. They are bordered on the south by Ta-hsia, on the west by An-hsi, and on the north by K'ang-chu"¹². Ta-hsia, which was situated to the south of Kuei river, or the Oxus, included Wakhan, Badakhshan, Chitral, Kafiristan(?) and also apparently the region lying between them¹³. So the great Yueh-chih, who lived to the north of Ta-hsia as well as the Kuei or Oxus (i.e. the Amu Darya) and its upper reach called the Ab-i-Panja, should have

occupied parts of Eastern Tadzhikistan and perhaps also Gorno Badakhshan. These areas were to the south of K'ang-chu (stretching on both sides of the Yaxartes or Syr Darya) and in the eastern or south-eastern direction of Ta-yuan (a region on or near the Syr Darya and including Ferghana). Thus the Great Yueh-chih, who had their capital to the north of the Kuei or Oxus, must have a part of Transoxiana under them. There is no reason to believe that the territory was lost by the Great Yueh-chih to some non-Yueh-chih power before the kingdom of the Great Yueh-chih was named as that of Kuei-shuang during the time of Ch'iu-chiu-ch'ueh¹⁴ or Kujula Kadphises. On the other hand, Transoxiana is one of the two regions to either of which we may ascribe the "bust : cap and palms of Dioscuri" coin-type used by Kujula. We have suggested elsewhere that the establishment of Kushana authority over the Great Yueh-chih territory in Transoxiana might have been achieved by Miaos, who was the founder of an independent Kushana territory.¹⁵

An-hsi or the Arsacid empire was to the west of the Great Yueh-chih territory as described in the *Shih-chi* and the *Chien han-shu*.¹⁶ When Ta-hsia or roughly Eastern Bactria was under the Great Yueh-chih, the western Bactria or the region around Bactria was within the Arsacid empire¹⁷. Ch'iu-chin-ch'ueh or Kujula Kadphises, who invaded An-hsi and destroyed *inter alia* P'u-ta or the Bactra area,¹⁸ pushed the western limit of the Kushana Kingdom at least up to the immediate west of the Bactra area.

There is, however, no evidence in support of Ghirshman's hypothesis, based on his interpretations of the testimonies of Ptolemy and Orosius, that Margiane, extending from Hyrcania to Bactria, was under Kujula. Neither of these authorities explicitly or implicitly gives such credit to the Kushanas.

If we believe that Kanishka I, a successor of V'ima, began to rule in c. A.D. 78, V'ima should not be considered to have a protégé on the throne of Kashgarh in the second decade of the 2nd century A.D. Again, we have no valid reason to believe that V'ima had under him Aria as described by Ptolemy. However, if the imitation of a coin-type of the Arsacid king Gotarzes II by V'ima suggests that he conquered or inherited a territory where coins of the Arsacid ruler had been in circulation,¹⁹ then the Kushana king or his father might have been responsible for extending the limit of the Kushana empire in the area of Western Bactria or in further west in which direction lay Aria.

Discoveries of copper coins of V'ima Kadphises, Kanishka (I), Huvishka, Vasudeva (I) and Vasudeva (II) (?) in Khorezm and the fact that the pieces of V'ima's successors carry a counter-mark of the shape of the letter S, which characterises also a group of indigenous Khorezmian

pieces of the 3rd century A.D., may suggest regular import of Kushana coins in the area concerned by way of trade and do not necessarily prove its inclusion in the Kushana empire. The traces of alleged Gandharan and other Indian influences in Khorezm may have been due to the cultural contacts between this area and the Kushana empire. Even if S.P. Tolstov is right in assigning the year 207, 231 and 232 (or 222), mentioned in three Toprak-kala documents, to the era of A.D. 78, the use of this reckoning, probably of Kushana origin, in Khorezm long after the dissolution of the Kushana empire does not necessarily suggest that it once included the territory in question. The era might have been imported into Khorezm through cultural and commercial contacts.

Chapter 118 of the *Hou Han-shu* states that the country of the Ta Yueh-chih "to the west borders on An-hsi", that on the eastern frontier of An-hsi "is found the city of Mu-lu", and that An-hsi "borders on K'ang-chu on the north"²⁰. As K'ang-chu was situated on both sides of the Syr Darya and as Mu-lu or the Merv area was in An-hsi or the Arsacid empire, a part of it (the Arsacid domain) lay between Chorasmia and Bactria and stretched up to the Oxus and K'ang-chu. This means that Khorasmia or Chorasmia was probably not a part of the Kushana empire at least up to the latest possible date for the general information on An-hsi furnished in chapter 118 of the *Hou Han-shu*, i.e., c. A.D. 125.^{20a} Hence if the alleged use of the era of A.D. 78 in Chorasmia is considered, for the sake of argument, as an evidence of its inclusion within the Kushana empire, this could not have happened much, if at all, before A.D. 125.

The above testimony of the *Hou Han-shu*, however, suggests that by c. A.D. 125 the north-western frontier of the Kushana empire had been extended to the immediate east of the Merv region. This might have been achieved by Kujula, or V'ima, or Kanishka I, or Huvishka. If the era of A.D. 78 was the same as the Kanishka Era, Huvishka, who ruled from at least the year 25 or 26 to the year 60 of the latter reckoning, had at least for some time held the territory to the immediate east of the Merv area.

If parts of Eastern Tadzhikistan had been, as suggested above, under the early Kushanas, these could well have been held by V'ima. It should, however, be noted that even if Gorno Badakhshan is considered to have been under the early Kushanas, we have some reasons to doubt his rule in this area.

There are indications that the Gorno Badakhshan region is to be included in the territory of the Ts'ung-ling of the Chinese treatises. According to Chapter 118 of the *Hou Han-shu*, the Northern Road reached from Su-le (Kashgarh area) to Ta-yuan (a region on or near the Syr Darya and including Ferghana) through the Ts'ung-ling.²¹ The northern section

of the Ts'ung-ling area, therefore, seems to have extended up to the borders of the kingdoms of the Kashgarh and Ferghana regions. Such an inference is substantially supported by the statement of Hsuan-tsang that the She river (Iaxartes) "rises in the north end of the Ts'ung-ling"²². This indicates that at least a section of the northern boundary of the Ts'ung-ling area was near or conterminous with parts of the limits of the kingdom of Fei-han or Ferghana.^{22a}

Hsuan-tsang also placed in the Tsung-ling mountains the country of Ku-mi-te (or t'o), extending over 2,000 li in length and 200 li in width, and situated near the Po-chu (Oxus) river adjoining Shih-k'i-ni (Shignan)²³. Ku-mi-t'o has been identified with Kumedh, referred to by Ya'qubi and others, and the territory in question is considered to have corresponded to the mountainous tract inhabited by the Komedai, mentioned earlier by Ptolemy²⁴. M.A. Stein adduced convincing reasons to locate the mountainous district of the Komedai in the Kara-tegin region and "the parts towards the valley of the Komedai" or their "ravine that opens into the plain country" in the narrow main valley of Kara-tegin up the Kizil-su (Surkh-ab) between Kara-muk and the gorges below Ab-i-gram.²⁵ The statement of Marinus that "when the traveller has ascended the ravine he arrives at the Stone Tower" has led M.A. Stein to locate the site of the Stone Tower²⁶ "in the vicinity of Daraut-Kurghan, where the defiles of Kizil-su are finally left behind and the wide Alai through is entered"²⁷. It appears that the Komedai, in whose territory was the Stone Tower,²⁸ occupied in the east the land up to the Daraut-kurghan area. This is not very far to the west of Irkesh-tam ($73^{\circ} \times 39^{\circ}$) near Taun-Murun, in the neighbourhood of which was the station, whence traders started for their journey to Sera following the route from the Stone Tower to Sera.²⁹ This station was apparently in the Kasian land,³⁰ and to the immediate east of the land of the Sakai, which included the territory of the Komedai.³¹ Hence the western boundary of the Kasian land or the Kingdom of the Kashgarh area was not too distant from the country of the Komedai. The latter, as noted above, was mentioned by Hsuan-tsang as Ku-mi-t'o, a part of the Ts'ung-ling region. So the north-eastern limits of the territory of the Ts'ung-ling could well have been near or even conterminous with the western or south-western frontiers of the kingdom of Kashgarh.

The *T'ang-shu* indicates that the Ts'ung-ling region was limited on the west by Shih-ki-ni (Shignan) and that to its south was Chipin.³² The Ts'ung-ling region was indicated by Hsuan-tsang, though not clearly by Fa-hsien, to have included Kie-P'an-t'o, identified with Ho-p'an-t'o of the *T'ang-shu* and located in the area around modern Sariq-gol or Sarikol.³³ So, at least this locality was within the eastern or south-eastern limits

of the Ts'ung-ling. Since Ta-mo-si-t'ie-ti or the modern Wakhan region was placed by Hsuan-tsang outside the Ts'ung-ling, the latter's south-eastern portion, extending up to Chi-pin, should be placed somewhere to the east of Wakhan and roughly to the south-east of Sarikol. Chi-pin could be entered from north by crossing Hsuan-tu or the Hanging Pass,³⁴ which was situated along the Indus from below Darel to Mirabat "some eight miles about the side valley of Kanda belonging to the Swat"³⁵. Hence the extreme south-eastern section of the Ts'ung-ling included Little Pamir, Hunza and some localities to its immediate east, an area to the immediate east of Gilgit and perhaps parts of Gilgit itself, and the Darel area up to the beginning of the Hanging Passage.

A section of Chapter 118 of the *Hou Han-shu* states that the "Southern Road", running from the west, "crosses the Ts'ung-ling and descends into the kingdom of the Ta Yueh-chih",³⁶ which, in this context, denotes the territory of the Kushanas³⁷. The exact date of this particular information is not known. However, as noted above, the latest possible date for such an information in Chapter 118 should be taken as c. A.D. 125. Hence the Ts'ung-ling might have been just outside the Kushana kingdom for some time between the date of its foundation and c.A.D.125.

In c. A.D. 73 the Han general Pan Ch'ao traversed the Ts'ung-ling area and went as far as the Hanging Passage.³⁸ The very fact that the Han general could have an unrestricted journey right up to the Hanging Passage in the extreme south-eastern section of the Ts'ung-ling region and in the confines of Chi-pin suggests the non-existence of effective Kushana rule in the Ts'ung-ling region or at least in its eastern areas. The information about the situation of the Ts'ung-ling area outside the Kushana empire, may well be dated to c. A.D. 73.

The territory of the Ts'ung-ling, as defined above, certainly included Gorno Badakhshan. Hence, if V'ima was the reigning Kushana monarch in c.A.D. 73, he might not have effective control over that area in that year, or might have lost it before that date or might not have at all ruled there.

The situation was different in the days of Kanishka I. Hsuan-tsang gave him the credit of enlarging his territory even to the east of the Ts'ung-ling³⁹. When in A.D. 90 the Kushanas sent a large army against Pan Ch'ao and the army marched through the Ts'ung-ling on their way to attack the Han general, he despatched some hundreds of soldiers to "the eastern borders"⁴⁰. "The eastern borders", obviously of the Kushana empire, lay in A.D. 90 to the east of the Ts'ung-ling area, then controlled by the Kushanas. Since Pan Ch'ao had to plan an attack on the Ts'ung-ling as early as A.D. 78., the Kushanas were probably well established there in or by that year. If Kanishka I began to rule in A.D. 78, he should be considered to have been responsible for annexing the whole of the Ts'ung-ling to the Kushana empire.⁴¹

It appears from the HouHan-shu that by c. A.D. 125 the Ta Yueh-chih (or the Kushana) territory stretched up to the neighbourhood of P'u-li or the Tashkurghan region.⁴² So the empire of Kanishka I, which included the Ts'ung-ling and perhaps some territory to its immediate east, might have extended at least up to an area near Tashkurghan.

The northern and north-eastern sections of the Ts'ung-ling were contiguous to the kingdom of Su-le. This suggests that the empire of Kanishka I, which included the Ts'ung-ling, touched the confines of the kingdom of Su-le or the Kashgarh area. Such a political geography also explains why Su-le or Kashgarh could have been the region or one of the regions which sent, out of fear, hostages to the court of Kanishka I, and why the people of Su-le feared the Yueh-chih in the period of Yuan-chu (A.D. 114-116)⁴³ or in the days of Huvishka. Huvishka's authority to the north of the Oxus is indicated by a Bactrian inscription referring to his name and found at Airtam in Uzbekistan.⁴⁴

The evidence of the Naqsh-e-Rustam inscription of Shapur I assumes significance in the light of above discussion. In course of enumerating the provinces of his empire this record refers *inter alia* to Mrgw (Merv), Hryw (Herat), Skstn (Seistan), Twgrn, Mkwrn and P'rtn (all of the three areas are to be placed in Baluchistan) and Hndstn or "India" (including the lower Indus country). Then the greek version of the document states *kai Kous [sanenon ethnos eos] improsthen Paskibouron kai eos Kas, Sogdikenos kai Tsatsenes, Oron...* The relevant part of the Parthian version can be transcribed as *Kwsnhst (r) H (N prh) s'L Pskbwr WHN'L K's Swgd W S'sas [mrz.]* The relevant portion of the Pahlavi version is too fragmentary to admit of any intelligible reading. However, on the basis of the Greek and Parthian recensions, the section concerned can be considered to refer to the "Ku-shan country as far forward as Paskibouron or Pshkbwr and up to the borders of K'sh, Sogdiana or Swgd and Sh'sh ('st'n)".⁴⁵

It is clear from the context that here is a reference to the limits of that portion of the Kushana territory which was incorporated within the Sasanid empire of Shapur I. M.E. Masson is certainly wrong in thinking that the section concerned only mentions some remote corners of Shapur's empire.⁴⁶ Had that been the intention of the author or authors of the inscription, such remote areas should have been mentioned by names, as he or they recorded the names of several other provinces of the empire (II. 2-5 of the Greek II, 1-2 of the Parthian, and II. 2-3 of the Pahlavi versions).

Paskibouron or Pshkbwr has been identified with Peshawar. Kas or Kash is obviously the Kashgarh area. S'ss (t'n) or Sh'shs(t'n) is considered

to be the same as Tashkent⁴⁷. The geographical limits of Sogdiana or Swgd, as mentioned in the Naqsh-i-Rustam inscription, cannot be considered to have been the same as those of Sogdiana, described by Ptolemy. His Sogdiana, as we have shown elsewhere, lay roughly between the Oxus (Amu Darya) and Iaxartes (Syr Darya) and stretched from about the Kyzylkum regions to the Pamirs.⁴⁸ Such an extent of Sogdiana would not have allowed the Tashkent area, situated to the north of the Syr Darya, to have formed the boundary of a section of the Kushana territory, the bulk of which lay to the south of the Oxus. In fact, several Persian and Arabic treatises consider Sughd or Sogdh as a small territory somewhere between Bukhara and Samarkand and on the Bukhara or the Zaravshan river.⁴⁹ Certain Sogdian documents refer to a person as "Lord of Sughd, master of Samarkand". The name can be traced in that of modern Soghd, which is situated between Bukhara and Samarkand.⁵⁰ Hence Swgd or Sogdiana of the Naqsh-i-Rustam epigraph may be taken to denote an area on the lower Zerafshan and between Bukhara and Samarkand.

The northern section of the Kushana territory, as incorporated within the Sasanid empire, thus lay to the east and south-east of the Samarkand-Bukhara zone, to the south of the Tashkent area and to the south-west of the Kashgarh region. Obviously the land so defined lay to the north of the Oxus and was in Kushana empire immediately before its annexation to the Sasanid domain.

This inference betrays the hollowness of the theory of some scholars who believe that the Kushanas never ruled to the north of the Oxus. The memory of the Kushana hegemony in that area was alive even in the days of Ibn Khurdabdeh, who referred to the king of Transoxiana as Kushanshah.⁵¹

As we have shown above, the Ts'ung-ling region of the empire of Kanishka I probably bordered on the kingdom of Su-le or the Kashgarh area. The latter territory formed the limit of one of the sections of Transoxiana ruled by the Kushanas immediately before their downfall. Hence the Kushana authority over the whole or a substantial part of the Kushana province of Transoxiana, as indicated by the Naqsh-i-Rustam record, might have been achieved by some time of the reign of Kanishka I.

The process of Kushana conquest of Transoxiana should be considered to have been completed at the latest by sometime of the period of Huvishka or, with less probability, by a certain date during the reign of Vasudeva I. None of their successors on the Kushana throne, who could not check the decline of the Kushana power, should be given, at least in the present state of our knowledge, the credit of aggrandising the empire in such a strategically important territory.

M.E. Masson, as noted above, does not include within the Kushana empire the land to the north of Tokharistan of early mediaeval age. Tokharistan or the land of the Tokhars has been referred to as Tu huo-lo in Chinese sources. According to Hsuan-tsang, it was bounded on the east by the Ts'ung-ling mountains, on the west by Po-li-sse (i.e. the Persian empire of the Sasanids), on the south by the great snowy mountains (i.e. the Hindu-kush) and on the north by the Iron Gates (perhaps located at Buzghala Khana near Derbent and not very far to the south-west of Karshi in Uzbekistan), and had the river Po-chu (Oxus) flowing through the middle of it.⁵² The areas of Ta-mi (Tirmidh, modern Termez), Chih-ga-yen-na, Hu-lu-mo, Su-man, Ku-ho-yen-na, Huo-sha (Waksh) and Ko-tu-lo (Khottal), all situated on or not very far from the northern bank of the Oxus, were in Tu-huo-lo.⁵³ It also included An-to-lo-fo (Andarab), K'uo-si-to (old Khost), Huoh (Kunduz region), Meng-kan (Mungan), A-li-ni, Heh-lo-hu (Ragh), Kih-lih-seh-mo (Ish-Keshm at the lower end of the valley of Wakhan), Po-li-hoh, Hi-mo-ta-lo, Po-to-ch'ang-na (Badakshan), Yin-po-kien, Ku-lang-na and Ta-mo-si-t'ie-ti (Wakhan region).

It appears that Tu-huo-lo of Hsuan-tsang included a territory stretching along the north bank of the Oxus, from the site of the Iron Gates (to the south-west of Karshi) to the Khottal area in the lower valley of the Waksh. The territory of Tu-huo-lo south of the Oxus seems to have corresponded substantially, though not fully, with Ta-hsia conquered earlier by the Yueh-chih. This definition of the limits of Tu-huo-lo is comparable with those of the regions under the government of Yueh-chih, as known from a study of the evidence of the *T'ang-shu* by E. Chavannes, who suggested that the territory of the government of Yueh-chih comprised Tokharistan.⁵⁴

It is obvious that the limits of this Tu-huo-lo or Tokharistan could not have been the same as those of the Kushana empire at its zenith, when it stretched deep into the Indian subcontinent. On the other hand, the ascription of the name of Tokharistan to the area which had been earlier conquered and colonised by the Yueh-chih (Tokharians) should suggest that Tokharistan of early mediaeval age comprised the areas which were once mainly under the Yueh-chih when they established their rule to the north of the Oxus and also conquered Ta-hsia to its south. If such an inference is correct, the early conquests of the Yueh-chih to the north of the Oxus should be placed in south-eastern Uzbekistan and eastern or south-eastern Tadzhikistan, but not in the Gorno Badkshan region.

We should not, however, place too much importance on the evidence of Hsuan-tsang of the 7th century A.D. in determining the limits of the Yueh-chih territory in the 2nd or 1st century B.C. Nevertheless, there is no reason to accept the northern limits of the maximum extent of the

Kushana empire as having been the same as those of Tokharistan of the early mediaeval age.

At least parts of the territory indicated by the widest geographical connotation of the name Sogdiana were certainly in Transoxiana ruled by the Kushanas. But the region meant by one of the narrowest geographical connotations of the name Sogdiana or Sughd might have been, as suggested by the Naqsh-i-Rustam inscription, outside the Kushana domain.

Hsuan-tsang referred to a country called Ch'u-shuang-ni-ka or Kusan-ni-ka⁵⁵. Apparently the same territory is mentioned in the *T'ang-shu* as Ch'u-shuang-ni-chia and also as Kuei-shuang-ni.⁵⁶ Available topographical details locate the country somewhere between Samarkand and Bukhara. So it could have been within or just outside Kushanshahr as described in the Naqsh-i-Rustam epigraph. In fact, the Chinese characters for *Kuei-shuang* in the name *Kuei-shuang-ni* are the same as those used to write the name Kuei-shuang, i.e. *Kushana*. Kuei-shuang-ni might, therefore, have been once in the Kushana empire.

E.J. Pulleyblank is obviously wrong in identifying Kuei-shuang-ni with Kuei-shan, the capital of Ta-yuan, mentioned in the *Ch'ien Han-shu*.⁵⁷ Ta-yuan probably lay on or near the Syr Darya and included the Ferghana area. E.J. Pulleyblank also connects the name *Kuei-shan* with *Kuei-shuang*.⁵⁸ If this suggestion is found acceptable, here we may have an allusion to a Kushana settlement in Ta-yuan, which lay on or near the route of the Yueh-chih migration to Ta-hsia, and not necessarily to the annexation of Ta-yuan to the Kushana empire. This hypothesis will hold good even if one equates the name *Ta-yuan* with the name *Taxwar*, as done by E.G. Pulleyblank⁵⁹, and connects Taxwar with the name of the Tokhari (Yueh-chih). As N.G. Gorbanova has shown, there is no literary or archaeological evidence indicating the inclusion of the Ferghana area in the Kushana empire.⁶⁰

The *Hou Han-shu* gives indications about the political influence that could have been exerted by the Kushanas in Eastern Turkistan in the last quarter of the 1st century A.D., during the most of which period Kanishka I was perhaps the reigning Kushana monarch. It is well-known that the Han empire tried to impose its authority on the kingdoms of Eastern Turkistan in order to contain the Hsiung-nu menace and to control the trade routes passing through this region. However, at times these kingdoms revolted, resulting in the temporary loss of Chinese influence there. "From the period of Chien-wu (A.D. 25-55) up to the period of Yen-kuang (A.D. 122-125) the western countries thrice detached (*themselves*) from the (*Han*) empire and thrice resumed communication with it" (*Italics mine*)⁶¹.

The first of the above three periods of absence of Chinese influence in Eastern Turkistan began with the emergence of the Hsiung-nu as the dominant power in the region from the time of the Chinese emperor Wang Mang (A.D. 9-23). Only So-chu among all of the local kingdoms maintained for some time independence of the Hsiung-nu and also augmented the sphere of its political authority. But ultimately it was also subdued by the Hsiung-nu. In A.D. 73, during the reign of Ming, the Hsiung-nu menace was contained and a military colony was established at Yi-wu-lu or Hami, and general Pan Ch'ao was sent to the "western regions" to win over peacefully Yu-t'ien (Khotan) and other countries to its west. "From the epoch the western countries had broken away (*from China*) sixty-five years (A.D. 9-73) elapsed when they mended the relations"⁶² (*Italics ours*).

Another epoch of the absence of Chinese authority in "western countries" began after the death of the Han emperor Hiao-ho in A.D. 105 "when the western countries revolted and continued to be independent of China up to the period of Yan-kuang (A.D. 122-125), when Pan Yung started to reassert the Han sovereignty in different areas of Eastern Turkistan."⁶³ The only other of the three periods of the loss of Chinese influence in "western countries", referred to above, must then be dated to some time between c.A.D. 73 and 106, even though the great Han general Pan Ch'ao was active in Eastern Turkistan from A.D. 73 to c. 102. The Han prestige received a setback when, after the death of the emperor Ming in A.D. 75, Yen-ch'i, and Ch'iu-Tzu attacked and killed the Chinese Protector General. The Hsiung-nu and Chu-shih caused troubles in the east. In A.D. 77 the Han military colony in Hami was abandoned and the territory was occupied by the Hsiung-nu.

Pan Ch'ao, no doubt, subjugated several kingdoms in the western region of Eastern Turkistan. But he had to deal often with rebellious territories. He could become master of the western region of Eastern Turkistan only after he repulsed the Yueh-chih (Kushana) invasion in A.D. 90 and secured submission of Ch'iu-Tzu in A.D. 91. It is significantly stated that in the third year of the emperor Ho (A.D. 91) "Pan ch'ao secured submission of the western countries"⁶⁴.

The chief task of Pan Ch'ao was to reassert Han supremacy in Eastern Turkistan mainly at the expense of the Hsiung-nu. So, it would have been diplomatic of him to woo important powers having connections with the Hsiung-nu. When Pan Ch'ao subjugated Su-le shortly before A.D. 78, the ruler of Ch'iu-tzu was a protege of the Hsiung-nu.⁶⁵ The identical ruler might well have been on the throne of Ch'iu-tzu in A.D. 78, when Pan Ch'ao planned to conquer it and in order to facilitate such a conquest, intended to attack the Tsung-ling region,⁶⁶ then apparently a part of the Kushana empire. The Kushanas probably had an alliance with Ch'iu-tzu,

which was under the political authority or influence of the Hsiung-nu. This suggests good relationship between the Hsiung-nu and the Kushanas in c. A.D. 78. It may be added that Gu-zan or the Guchen area above Urumchi, a king of which joined, according to the *Li-yul-gyi-lo-rgyus*, in an expedition led by Kanika (i.e. Kanishka I), lay in the zone of the Hsiung-nu influence.

Pan Ch'ao is not known to have put into operation his plan chalked out in A.D. 78 for invading the Ta'ung-ling area (of the Kushana empire). This indicates his desire to cultivate, at least for the time being, good rapport with the Kushanas, the only great power, other than the Hsiung-nu, that he had to deal with in Eastern Turkistan. In fact, he utilised their help to subjugate Su-le and Chu-shih. So even if the Hans and the Kushanas were not close allies, the relation between them was, on the whole, not bad up to the time such assistance was accepted. However, the rapport must have been estranged when in A.D. 86 (or 87) Pan Ch'ao turned down the proposal of the Yueh-chih (Kushanas) for establishing a matrimonial relationship between them and the Han. The two powers even clashed with each other in A.D. 90. and the prestige of the Kushana empire received a setback in Eastern Turkistan.⁶⁷

Thus from c. A.D. 78 to A.D. 86 or 87 or 90 the Kushanas were an important alien power in Eastern Turkistan and could have commanded fear and respect in that region. We have noted elsewhere that Kanishka I, who probably began to rule in A.D. 78, might have an alliance with Khotan.⁶⁸ Khotan itself was mostly under the Chinese influence in the last decades of the 1st century A.D. starting from c. A.D. 73. But this did not necessarily deter a ruler of Khotan from joining Kanika (Kanishka I) in a military expedition, especially when the attitude of the Han to the Kushanas was not totally inimical up to c. A.D. 86 or 87.⁶⁹ We have the example of K'ang-chu assisting the Han general Pan Ch'ao in A.D. 78 in his operation against the cities of Ku-mo and Shi Ch'ang, though K'ang-chu was then not subject to China and apparently had good rapport with the Yueh-chih.

Chung, the king of Su-le, was captured by the Chinese in c. A.D. 84 only after the Yueh-chih (Kushana), intervened on behalf of the Han and persuaded K'ang-chu to call off its assistance to Su-le.⁷⁰ Hence Su-le might have feared the Kushanas in the eighties of the 1st century A.D., when Kanishka I was probably on the Kushana throne. The King of Su-le might have sent hostages to Kanishka I before A.D. 84.

It appears that Kanishka I, whose relations with the Chinese were not bad until A.D. 86 or 87, had good rapport with the Hsiung-nu up to at least c. A.D. 90. He could have exerted some influence in the kingdom of Su-le or the Kashgarh area and might have an alliance or special political

relation with Ch'iu-tzu or the Kucha region and also with Yu-t'ien or Khotan.⁷¹ But none of these territories ever became an integral part of his empire. Hence there is no reason to support the theory that Vashmana and Amgoka, known from Kharoshti inscriptions discovered by Aurel Stein in Central Asia, were vassals of Kanishka I in Khotan or that their records were dated in his era. Infact, Vashmana and Amgoka were rulers of Shan-shan and flourished not earlier than the 3rd century A.D.⁷²

The empire of Kanishka I thus perhaps included the whole of the Tsung-ling region as defined above, and an area to its immediate east, but not Khotan, Kashgarh or Kucha. He might have also held the territory to the north of the Oxus attributed to Kushanshar in the Naqsh-i-Rustam inscription of Shapur I.

The same may be said about Huvishka's connection with Transoxiana. We have noted above a Bactrian inscription, discovered at Airtam, referring to his reign. We do not know whether Oaksho or the figure personifying the Oxus on some coins of Huvishka alludes to his rule in that region.⁷³ His empire extended in Central Asia up to the borders of P'u-li or the Tashkurghan area in the east.⁷⁴

Though Huvishka might not have directly ruled beyond these territories in Central Asia, he might have wielded political influence in Su-le. We have shown elsewhere that the Kushanas were instrumental in making Ch'en-P'an, of Sü-le⁷⁵ in A.D. 114-116 or in A.D. 114-119⁷⁶. In fact, the Kushanas could have commanded great fear and respect in Eastern Turkistan from the time of the death of the Han emperor Hiao-ho, "when the western countries revolted", to the period of Yen-Kuang (A.D. 122-125), when Pan Yung re-established Chinese authority in different areas of Eastern Turkistan⁷⁷. In the second year of the period of Yung-chien (A.D. 126-127), Yen-ch'i and then Ch'iu-tzu, Yu-tien, So-chu, Su-le, etc., submitted to the Chinese. Ch'en-p'an, who had earlier ascended the throne with the help of the Great Yueh-chih, sent envoy to the Han emperor Shun in the second year of the period of Yung-Chien (A.D. 126-127) and was given the title of "the military commander-in-chief, dependent on the Han". In the fifth year (A.D. 130) he sent his son, in company of the envoys of Ta-yuan and So-chu, to the Han court to serve the emperor. In the second year of the period of Uang-Kia (A.D. 133) presents were sent to the Han court by Ch'en-p'an.⁷⁸

It appears that from c. A.D. 105 to c. A.D. 122-125 the Kushanas might have the authority to influence the political events in the western regions of Chinese Turkistan, particularly in Su-le. But by c. 122-125 or definitely by sometime of A.D. 127 they lost that influence. The *Hou Han-shu* states that "while Yen-ch'i, and then Chiu-tzu, Su-le, etc., submitted to the Han in the second year of the Yung-Chien (A.D. 126-127), Wu-sun

and the countries occupying the Tsung-ling and the regions further to the west broke" (all relations with China).⁷⁹ So whatever rapprochement might have been established between the empire of the Han and the Kushanas, after the conflict of A.D. 90, it was snapped again.

"From the period of Yang-Chia (A.D. 132-134) the imperial prestige (of the Han empire) began to fall gradually, Different kingdoms (of the west) became arrogant and negligent. They oppressed and attacked one another in turn" (*Italics mine*).⁸⁰ It is not known whether Huvishka, who might have reigned up to c. A.D. 138 or even up to c. A.D. 142 or 145, tried to fish in the troubled water.

We have already suggested that Huvishka's empire might have extended in the north-west up to a region to the immediate east of the place called Mu-lu or Merv in Turkmenistan.⁸¹ As the Naqsh-i-Rustam record places the whole of the territory named after (and obviously including the area around) Mrgw (Merv) outside Kushanshahr,⁸² the area in question was lost by the Kushanas either in the latter half of the reign of Huvishka or perhaps during the rule of one of his successors.⁸³

We do not know whether Hryw (Herat), which the Naqsh-i-Rustam inscription excludes from Kushanshahr,⁸⁴ was ever ruled by the Imperial Kushanas. We have definite indications that Skstn(Seistan), was never annexed to the Kushana empire, which, however, incorporated, from the days of V'ima Kadphises, the Kandahar area to the east of Seistan.⁸⁵

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81. *RFKE*, p. 130, n. 170; p. 138
82. See above n. 45.
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AGRICULTURE IN ANCIENT BENGAL

Pushpa Niyogi

Agriculture was the main occupation in the village of ancient Bengal. A large fraction of her population was dependent upon it for their very existence and livelihood. Scholars are divided about the time and place of the origin of agriculture. Although agriculture has no single or simple origin but its adoption took place at a very early age, though we have no definite evidence of the time and the place when it was adopted in this part of the sub-continent. Bengal agriculture is still largely venerable and primitive : the land is in most cases unevenly distributed and is dependent on the whims of nature. All village land is not suitable for cultivation. Probably only one-fourth of the net sown area is irrigated. Large number of farmers are concentrated on a very small area under cultivation. Bengal agriculture suffers from lack of water and fragmentation of holdings.

Archaeological information from this part of India is comparatively scanty. It does not tell us how the first piece of land was brought under cultivation in Bengal and by whom. Very little is known about the agricultural communities that produced a surplus of agricultural products which was regarded as sufficient for the population and also filled the granaries for emergencies.

The beginning of agriculture in Bengal, as in the rest of India, can be assigned to the ancient period. S.K. Chatterjee states : "The Austric tribes of India appear to have belonged to more than one group of the Austro-Asiatic section—to the Kol, to the Khasi, and to the Mon-Khmer groups. They were in the neolithic stage of culture and perhaps in India they learnt the use of copper and iron. They brought with them a primitive system of agriculture in which a digging stick (*lag, lang, ling, lak*) was employed to till the hillside. Terrace cultivation of rice on hills and plains cultivation of the same grain were in all likelihood introduced by them. They brought the cultivation of the coconut (*narikela*), the plantain (*kadala*), the betel vine (*tambula*), the betel-nut (*guvaka*), probably also turmeric (*haridra*) and ginger (*sringavera*), and some vegetables like the brinjal (*vatingama*) and the pumpkin (*alabu*)".....¹

S.K. Chatterjee further points out that the Alpine race, who forms the main element in the composition of the present Bengalis, contributed much to our material culture, such as the cultivation of some of our most important plants like rice and some vegetables and fruits.² India's most important contribution to world agriculture is rice, the staple food and crop of Bengal.

Soils

The agriculture of a country is dependent to a large extent on the nature of its soils, which is influenced by climatic factors. The soil is of utmost importance in agriculture and in the role of nature in helping the soil to become fertile. There are vast stretches of alluvium and alluvion soil in the regions washed by the river Ganges and its tributaries which are exceptionally fertile. This fact is attested by earlier Classical writers, and even Chinese pilgrims.³ Contemporary writers of Bengal and outside also describe different parts of Bengal. Thus, Sandhyakara Nandi describes *Varendri* (North Bengal) as "The land which had all its important regions filled up with crops and water and had as their ornaments the groves..... It had elevated lands bearing excellent flowers". *Varendri*, as described by him, had marshy lands, besides, land in which paddy plants of various kinds grew. It abounded in "sugarcane and bamboo and there were also vast fields for growing fine plants".⁴ It appears from the *Krsiparasara*⁵ that the fields were extensively cultivated in Bengal and many crops, specially paddy, were largely grown from very early times. Side by side, with fertile land there were sterile regions uncultivable in Bengal. These places were without water. The *Bhuvaneswar Prasasti* described a region in Uttara-Radha (West Bengal) as '*Jangala patha*' where there was no water (*Radhayam-ajalasu jangala-patha*).⁶

Inferior land and land used for purpose other than those of cultivation are mentioned in some inscriptions, although rarely. *Apakristabhumi* means inferior land which was included in the fertile area (*Ksetra*); gourds grew in this land.⁷ Refuse land is indicated by the term *avaskara*.⁸ '*Avaskara-sthana*' of the Irida plate of Nayapaladeva means a place where sweepings are thrown. Such land was not used for cultivation.

River side land is probably indicated by the expression *Kachchabhumi*.⁹ Dr. Barnett suggests that the word *kachcha* may be connected with *kachchha* meaning *river-side*.¹⁰ *Vegara-bhumi* used in the same inscription seems to bear the same meaning as Hindi *bagar* which stands for a hedge.

In the *Amarakosa*¹¹ twelve types of land are mentioned. They are *urvara* (fertile), *ushara* (barren), *mara* (desert), *aprahata* (fallow), *sadvala* (grassy), *pankila* (muddy), *jalaprayamanupam* (watery or wet land), *sarkara* (land of pebbles and pieces of limestone), *sakravati* (sandy), *nadimatrika* (land watered by rivers), *devamatrika* (land watered by rain).

From the *Abhidhanaratnamala*¹² we come to know that village lands were classified as *urvara* (fertile), *irina* (barren), *sadvala* (grassy), *nadvala* (filled with reeds), *khila* (fallow), *maru* (desert) and "those which were black or yellow, and those which owed their fertility to rivers or rains". It is further stated in the same work that there were different kinds of

fields for different classes of crops, such as fields for producing varieties of rice, beans, oilseeds, hemp, barley, vegetables, etc. The *Krsiparasara*¹³ also emphasises on cultivated fields of Bengal.

There is another class of land in Bengal known as cultivable waste. Such land may be brought under cultivation with the help of irrigation.

Soils of different colours are also noticed (such as red, yellow, sandy, etc.). The author of the *Krsiparasara*¹⁴ put forward his suggestions regarding suitability of the soil for cultivation in different months. Thus, "The soil is said to be like gold in *Magha*, silver in *Phalguna*, copper in *Chaitra*, and so on." It is further stated that cultivation in the dewy season (*hemanta*) is held to produce the richest yield, while at the advent of the rains (*ghanagama*) it results in dire poverty.

Weather and agricultural technology

Weather information is of utmost importance in Indian agriculture. It remains an important limiting factor because agriculture depends on rainfall. The monsoon rains are of great importance to the agriculturalists. The *Krsiparasara* considers agriculture as depending wholly on rainfall (*vṛsti-mula-drśih-sarva*). It gives details about rainfall in the different months of the year; about immediate rainfall; at the passing of Planets (from one Zodiac to another); indication of drought etc.¹⁵ But the *Krsiparasara* does not give us an idea about total rainfall in different parts of India or Bengal.¹⁶ The people of Bengal were fond of weather forecasts, which were based on practical observations and cultivators' manual¹⁷. As a result, the people in general became trained in the study of weather condition.

Besides, the ancient people had knowledge about rain-measurement.¹⁸ Varahamihira, in his *Bṛhatsamhita* deals, with the meteorological observations about different quantity of rainfall and its results.¹⁹ The people were also accustomed to weather forecasts which were based on practical observations.²⁰

Fertilising and conditioning

Soil fertility is the capability of a soil that helps the development of plants. Where the land is not productive, essential or productive or creative substance may be used to the soil. These are called fertiliser or manure. The addition of fertiliser to the soil increases yields. But over dose of the same may be harmful. Knowledge of the fertiliser technology has its economic value.

The *Krsiparasara* recognises the usefulness of manure for crops. It clearly states that without manure, "the paddy plants grew up bereft

of fruits"²¹. It also describes how the chief manure (cow dung) in India was made and used. It states, "having worshipped the heap of cow dung in *Magha*, one with reverence, should lift it with spades on an auspicious day and *Naksatra*". The *Krsiparasara* then continues, "having powdered all that and dried it up in the Sun, throw the manure into a pit in every field in *Phalguna*"²². T.C. Dasgupta gives an account of some of the manures for crops. Thus, "water in which fish has been washed, are poured at the root of a gourd plant"; "the land which contains rotten paddy as manure is fit for the rearing of chillis"; "the smut of corn (paddy) should be thrown into the bamboo-grove, the result will be a very rapid increase of the grove. Earth should also be thrown beneath a bamboo-grove to serve the purpose of manure; betelnut plants require cow dung (liquid) as manure for their growth; pieces of rotten straw or chips of wood should be used as manure at the roots of arums (*olla*); the edible arums will thrive if ashes are used at their roots....."²³

From the above it follows that the people of ancient Bengal as well of India knew the use of manure for increasing the productivity of the soil. They also had the knowledge of the proportion of manure to be used for different kinds and quality of land.

Seeds

Seeds are important in ploughing. In agriculture much depends upon the property of the seed sown and its preservation. The *Krsiparasara* lays down rules about the preservation of seeds, procedure about sowing seeds,²⁴ and their collection. All seeds are to be collected and dried in the sun in the month of *Magha* or *Phalguna*. They are to be kept in small bundles (*putikas*). Seeds, uniform in shape, and free from chaff or other kinds of grain, yield rich harvest; so care should be taken to keep them together; the bundles should be free from grass and tightly tied up. They should be kept in sacred and clean place; and not to be kept "on seeds, ghee, oil, butter-milk, lamp or salt". More details are also furnished by the same authority. The time of sowing of seeds (for paddy cultivation) is best in *Vaisakha*, "of middle quality in *Jyaistha*, bad in *Asadha* and worse in *Shravana*".²⁵ It also mentions the stars (*Naksatras*) which are good and bad. More details are furnished by the same work.²⁶

Besides, a cultivator should have knowledge about the quantity of seeds required for his field. This is best illustrated in some of the land grants of the period. The extent of land concerned is indicated by a term denoting the quantity of seeds that could be sown on it.²⁷ In some of the Gupta records the expression '*Kulyavapa*' is used as a denomination of land measure denoting the area of land, having of the capacity of bearing one *kulya* of seed. The element *vapa* in the compound *kulyavapa*, derived from the root *vap* to sow, definitely establishes this interpretation.

In later times land measures allied to the *kulyavapa* measure, e.g. *dronavapa*, *adhavapa*, etc., became widely current. It is to be noted that the use of the word *vapa* in these expressions clearly points to the extent of the seed-bearing capacity of the land covered.²⁸ Other seed measures such as *adhaka*, *pataka*, *unamana*, *kaka*, *kakanika*, etc. are found in Bengal inscriptions. These along with *kulyavapa*, *dronavapa*, *adhavapa*, etc. constitute different grades of measure, based on a common unit which has to be ascertained.²⁹

People engaged in cultivation had knowledge of how seeds of a special type is to be used for tillage. They also had experience of seedbed preparation, which mostly depended on the condition of the soil. The farmers of ancient Bengal were also familiar with cropping system, i.e. the kind and sequence of crops grown over a period of time on a given piece of land.

Transplantation

The *Krsiparasara* gives us an account of transplantation of seedlings. They should be uprooted when young, tender and soft.³⁰ The same idea is found in the *Brihatsamhita*, which states that young trees without branches must be transplanted in the (dewy) autumn season. Strict rules are laid, which are to be followed during transplantation.³¹ From the month of *Sravana* to *Asvina* transplantation of seedlings took place : in *Sravana* the seedlings were planted at a distance of one cubit each, in *Bhadra* at half a cubit and in *Asvina* four fingers apart.³²

Kattana of paddy

Kattana means 'thinning out'. The *Krsiparasara* states : "the *kattana* of paddy is to be performed in the month of *Asadha* and *Sravana*," when there is no rainfall. If *kattana* is not undertaken, it is believed that there will be poor growth of paddy. "One should not do *kattana* and transplantation of paddy in a low land nor put manure, but should merely weed out the grass."³³

Removal of weeds from paddy

Removal of weeds from paddy field is mentioned in the *Krsiparasara*.³⁴ The technical term for it is *nistrinikaranam*. Paddy trees are surrounded by grass and weeds. If these paddy trees are not made free from weeds it will not bear sufficient fruit. Weeding is generally done in the months of *Asvina* and *Kartika*.

Crop rotation and double crop

Crop rotation was known from early times and sowing of different items at stated interval was also practised.³⁵ Kautilya also refers to the growing of different crops in succession in the different seasons.³⁶ In

the *Mahabhasya* of Patanjali it is stated that the land was ploughed in conformity with the need of the main crop, for example, sesamum was sown with beans, the later is considered as the main crop and the other its subsidiary.³⁷ The ultimate result is the rise or increase of the total production of the soil.

Besides rotation of crops, India had a double rainfall and the Indians generally gathered two harvests. In the *Arthasastra* there is clear reference to three harvests: the rainy crop, autumnal crop and the winter crop.³⁸ The Classical writers also held the same view.³⁹ In Bengal there were at least two crops.

Monoculture

The practice of growing the same crop each year on a given acreage is known as monoculture. This was followed in ancient Bengal.⁴⁰

Crop protection

Crops are exposed to attack and damage by insects and pests and natural calamities, such as, excess of rain and flood; occasionally inundations swept away the seeds; lightning may prove dangerous; drought; plant disease, etc. Besides natural calamities, standing crops were damaged by animals and birds. Therefore, the farmers should be alert to protect their crops. Failure to do so may result in famine (*durbhiksha*).⁴¹ The *Krisiparasara*⁴² refers to the prayers of the cultivators to God Indra for the grant of good rainfall. The same work suggests a *mantra* for the safeguard of the plants from pests and insects.⁴³

Harvesting and crop processing

The *Krisiparasara* states that harvesting of paddy should take place in the month of *Pausa*,⁴⁴ when the crop is ripe "get the corns thrashed properly and weighed with an *adhaka*".⁴⁵ Before the actual commencement of reaping, the *Krisiparasara* requires the performance of the ritual held in *Agrahayana*.⁴⁶

Next the cultivators should have the reaped plants stocked on the threshing floor. The threshing floor was known as *khala* and a pillar or post, in the middle of the threshing floor in which oxen are bound to thrash out the grains, is put up. It is known as *medhi*.⁴⁷ In the *Ramacarita*⁴⁸ there is a reference to the threshing floor on which the reaped corns were scattered in all directions and threshed by bullocks. Threshing was also done by human foot.⁴⁹

For dividing the grain from the husk the cultivator should carefully sift the superior grain from the inferior stuff by means of the winnowing fan, etc. The *Amarakosa* gives details about the husking of corn.⁵⁰

Storage

The *Krisiparasara* requires that after all the formalities having been done the grains are to be measured and kept in the granary (*dhanyagara*) on an auspicious day and star, after worship was offered to the Goddess of Wealth. Two *mantras* are written and kept in the granary for prosperity.⁵¹

Cycle of farming operations

From an early time the practice of cultivation remained more or less the same. In the *Kullavagga* the practice and procedure of agriculture is given. "First you have to get your field ploughed. When that is done, you have to get them sown. When that is done, you have to get the water led down over them. When that is done, you have to get the water let off again. When that is done, you have to get the weeds pulled up. When that is done, you have to get crops reaped. When that is done, you have to get the crop carried away. When that is done, you have to get it arranged in bundles; when that is done, you have to get it trodden out. When that is done, you have to get the straw picked out. When that is done, you have to get all the chaff removed. When that is done, you have to get it winnowed. When that is done, you have to get the harvest garnered. When that is done, you have to do just the same the next year and the same all over again the year after." Agricultural procedures remained unchanged for decades, even centuries.

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2. Ibid, p.31.

3. Megasthenes— "India has many vast plains of great fertility— more or less beautiful.... The great part of the soil, moreover, is under Irrigation and consequently bears two crops in the course of the year", pp.29-30; "The magic soil of India produced two or three bumper crops (Diod: 11.16.5; ii, 35.6; Strabo, xv, 1.20; the fertility of the Gangetic plain was an object of amazement for the Greek and Latin writers (Diod: 11.35.36; Pliny, xxx VL.c.17(21); Aelian History, XII, XXXIII; Hiuen-tsang bears testimony to the fact that in all parts of the province...cultivated...produced grains...Beal, *Record*,II).

4. Sandhyakara Nandi, *Ramacharita*, Ed. by R.C. Majumdar, R.G. Basak and N.G.Banerji, Rajshahi (Bangladesh), 1939, V, 17-20, p. 91 ff.

5. *KrisiParasara*, Ed. and Trans. by Girja Prasanna Majumdar and Sures - Chandra Banerji, Calcutta, 1960, XI.

6. *El*, VI, pp. 203-07.

7. *SASB*, LXVII, pp. 99 ff.

8. *El*, XXII, pp. 150 ff.

9. *Ibid*, XIII, pp. 216 ff.

10. *Ibid*, 217 n.

11. *Amarakosa* (with Ksirasvami's commentary): Ed. H.D. Sharma and N.G. Sardesai, Poona, 1941, chapter I, pp. 5-6; 70-71. 12. *Abhidhanaratnamala* of Halayudha, Ed. T. Aufrecht, London, 1861; reprinted Lahore, 1928, Chapter II, pp. 3 - 6; 7-9.

13. *Krisiparasara*, op. cit., p. xi.

14. *Ibid*, p. xiv.

15. *Krisiparasara*, vv. 30-78.

16. *Ibid*, V. 29; Kautilya says that when one-third of the requisite quantity of rain falls, both during the commencement and closing months of the rainy season (*Śravana* and *Kartika*) and two-thirds in the middle (*Proṣṭapada* and *Āsvayujā*), then the rainfall is considered very even (*sushumarupam*). (*Arthasastra*, II, 24).

17. Khanar vachan; weather lore is part of man's continual attempt to understand come to terms with his environment. Weather lore was a part of early religion and it has a long history. Its first exponents were the priests or wise-men, who decided the dates of sowing or harvest. The basis of it is desired from common sense + superstition, from sound observation to wishful thinking.

18. (Cf, *Arthasastra*, II, 25..... a bowl (*kunda*) with its mouth as wide as an *aratni* (24 *angulas*) shall be set up a rain-guage (*varshamanā*); the *Krisiparasara* refers to an inelegant way to ascertain rainfall. It explains *adhaka* as a vast expanse of water as a hundred *yojanas* wide and thirty *yojanas* deep (vv. 26 - 28). The *Meghamala* (*Journal of the Oriental Institute*, IX, 418) states that continuous rain for seven rights together was called *drona*.

19. *Brihatsamhita*, Appendix I.

20. Tamonash Chandra Das Gupta, *Aspects of Bengali Society from Old Bengali Literature*, University of Calcutta, 1935, pp. 230 ff.

21. *Krisiparasara*, vv. 111.

22. *Ibid*, vv. 109-110. Bana in his *Harsacarita* describes how a cultivator carried rubbish and cow dung in carts drawn by oxen to fields that had become unfertile, p.202.

23. Tamonash Chandra Das Gupta, *op. cit.*, pp. 236-239; his account is based on Khanar Vachan. It is said that those things (e.g. cow dung) which injure man cure the plants. In the *Arthasastra* it is mentioned that cotton trees are manured with bones and cow dungs (*Arthasastra*, II, 24). Kautilya gives us more details of the same (*Ibid*).

24. *Krisiparasara*, vv. 157-167; 168-181; Medhatithi mentions sowing of unripe seeds may harm the crops (On Manu, VIII, 243). The *Prabandhacintamani* of Merutunga at one place states that seeds which have burnt, do not sprout (p.82).

25. *Krisiparasara*, vv. 168.

26. *Ibid*, vv. 170 - 176; cf, The Agni-Purana (cxxx, 49) gives details about the time of sowing seeds; cf. *IHQ*, VII, 23-24.

27. Puspa Niyogi, *Contributions to the Economic History of Northern India*, from the 10th to the 12th century A.D., Calcutta, 1962, pp. 89-95.

28. *IB*, pp. 68 ff; 169 ff; *EI*, XIV, pp. 156 ff.

29. Other seed measures, *dronika*, *kharika* (*EI*, XXVI, pp. 1 ff; *IB*, pp. 106 ff, 169 ff).

30. *Krisiparasara*, vv. 184.

31. *Ibid*, vv. 183 - 185; the *Brihatsamhita* (I, vv. 7-9)

32. *Ibid*, vv. 185.

✓ 33. *Ibid*, vv. 186 - 188.

34. *Krisiparasara*, v. 189. weeds are plants growing where they are not wanted money devised are made to destroy weeds.

35. The *Taittiriya Samhita* (5.1.73) states that there were two harvests every year and adds : "Barley ripens in summer, medicinal herbs in the rainy seasons; vrihi (rice) in *sarat*; beans and sesamum in *hemanta* and *sisira* (winter).... Apparently there was a rotation of crops, *yava* (barley) being followed by *vrihi* (rice), *masa* (bean) and *tila* (sesamum); cf, Gobhila, G.S. (1.4.29). Crop rotation commonly involves the growing of two or more crops in succession on a piece of land.

36. Kautilya (2.24, 12-15) also prescribes rotation of crops.

✱ 37. *Mahabhasya* on VIII, 4.13; V.S. Agrawala, *India as known to Panini*, Lucknow, 1953, p. 200).

38. *Arthasastra*, II, 24.

39. Mc Crindle, *Ancient India as Described by Megasthenes and Arrian*, p.54. Strabo, XV, 1.33.

40. Mechanical weed control resulted in monoculture. i.e. farmer's favour the idea of growing one major food crop.

41. The *Garuda Purana* tells us about famine (214, 37); The *Aryamanjusrimulakalpa* speaks of all such misfortunes (pp. 207, 209, 221, 555, 557, 657)

42. *Krisiparasara*, v. 136.

43. *Ibid*, v. 195; "Get the *mantra* written with lac-dye, tied in the midst of the crops" The *Krisiparasara* names goats, swine, deer, buffaloes, sparrows and parrots, etc. as destroying standing crops, p.84. The *Harsacarita* informs us that the deer and hares destroyed the rising buds of the sugarcane plants.... (HC, p.229). A verse in Yogesvara tells us about a multitude of pigeons swallowing standing *kodrava* corns (*Subhasitaratnakosa*, v. 264; *Saduktikarnamrita*, 2.162.1) *Aryasaptasati* speaks of deer and parrots consuming corn in the paddy fields. (*Aryasaptasati*, vv. 101, 192, 346). Standing crops, particularly paddy, suffered from the attack of numerous pests and insects. The *Krisiparasara* gives a list of the names, *gandhu* (modern *gamjhi*), a small insect attacking paddy when small: *pandara* a name of a disease which makes the plants yellow; and white: and *mandaka* attack plants and they are turned red.

44. *Krisiparrasara*, vv. 237.

45. *Ibid*, vv. 238 - 240.

46. *Ibid*, vv. 206 - 213.

47. *Ibid*, vv. 214 - 220.

48. *Ramacarita*, Ed. by R.C.Majumdar, R.G. Basak and N.G. Banerji, Kaviprasasti, Rajshahi (Bangladesa), 1939, 13.

49. Cf, *Desinamala* of Hemacandra, Ed. R. Pischel. 2nd Ed. by P.V. Ramanujaswami, Vizianagaram, 1938 III 37; VI, 34; VI, 40.

50. *Amarakosa* with Ksiravamin's commentary, Ed. K.G.Oak, Poona, 1913, IX, pp. 204 - 205.

51. *Krisiparasara*, vv. 241; *Agni Purana*, CXXI, 51.

WESTERN STUDIES ON THE HISTORY OF ORISSAN TEMPLE ARCHITECTURE

D. R. Das

Temples of Orissa, playing an active role in the life of the people of the land, were always objects of attraction. Builders took pride in their construction, panegyrist described them in unbridled admiration and visitors looked at them with wonder and awe. However, the information that can be gathered from such reactions seldom throws any light on the character and history of Orissan temple architecture. Earlier references to the temples of Orissa do not go beyond suggesting that these were of great height. Thus the Sobhanesavara temple inscription (Neyali, Cuttack Dist.) states that to a traveller, passing on the way, the temple looks like the Mount Meru and the Himalayas, the mountain where the sun sets, the Kailasa, the Vindhya, the Mahendra, or the mount where the sun rises.

When epigraphic records are of little help in reconstructing the architectural history of Orissan temples, the accounts contained in the literary documents are also not very useful. Their main focus is on the celebrated temple of Jagannatha at Purusottama Puri which occupies the pivotal position in the religious life of Orissa. The *Madala Panji*, the palm leaf Oriya manuscript of the temple, records traditions about the building of the Jagannatha temple but much of it is of doubtful historical value. The *Deula Tola*, written by Sisu Krisna Dasa sometime during the 17th/18th century A.D., made an attempt to reconstruct the history of the construction of the Jagannatha temple and participation of labour in this enormous project. Though restricted by the compulsions of contemporary norms of the society, the author of the *Deula Tola* shows some awareness about recording the structural aspect of a temple. In this connection reference may be made to some recently discovered texts which give details about the constructional history of the Sun temple at Konarak. The authenticity of these texts is not beyond doubt and hence they should be ignored.

The study of Orissan temples, in its modern sense, began when A. Stirling published "An Account, Geographical, Statistical and Historical of Orissa Proper, or Cuttack" in 1825 in the *Asiatik Researches*. In this paper, the author tries to document the temples of Bhubaneswar and ascertain their constructional features. The knowledge of Orissan temples, being in a nebulous stage, did not allow Stirling to understand their chronological sequence. He, therefore, comments, "The forms and character.

of all the principal temples at Bhubaneswar, and indeed throughout the province, being exactly similar, a more particular account of the plan distribution of the great Pagoda (i.e. the Lingaraja) will answer the purpose of a general description." The description of the Lingaraja that follows is of a general nature. At the same time, the use of local names for some architectural members suggests that Stirling was aware of the existence of an indigenous nomenclature developed by the Oriya architects. However, Stirling depended too much upon the legendary accounts of the past history of Orissa for his study and, in consequence, led himself to faulty conclusions. This is evident from his observations, "The temple of the Ling Raj at Bhubaneswar is both the finest monument of antiquity which the province contains, and likewise indisputably the most ancient. It took forty-three years to build, and local traditions, as well as the histories of the country, answer in fixing the date of its construction as A.D. 675." Obviously, Stirling had no other alternative but to accept legends as authentic history when means of verifying their reliability was extremely limited. His description of the Jagannatha temple is indeed a summary account of the *Madla Panji*. Here no attempt has been made to tell the architectural features of this temple presumably because he did not consider it necessary. A completely different approach was made towards the Sun temple at Konarak. Stirling gave a detailed description of the temple taking into account both its architectural and sculptural aspects. It is an invaluable document for the reconstruction of this temple, much of which has disappeared long since. Summarising his assessment, Stirling comments, "If the style of the Black Pagoda betrays, in the rude and clumsy expedients, apparent in its construction, a primitive state of some of the arts, and a deficiency of architectural skill, at the period of its erection, one cannot but wonder at the ease with which the architects seem to have wielded and managed the cumbersome masses of iron and stone used for the work, in an age when little aid was to be derived from any mechanical inventions; and it must be allowed that there is an air of elegance, combined with the massiveness in the whole structure, which entitles it to no small share of admiration." The statement exposes the mind of Stirling which was not yet ready to appreciate the constructional side of a temple. In his perception it was rude and clumsy.

In 1838, Lt. Kittoe's Journal of the Tour conducted during 1836-38 in the province of Orissa was published in the *Journal of the Asiatic Society of Bengal*. Kittoe was primarily a geologist and by way of his geological explorations, he came across a number of ancient monuments which he described with illustrations. Kittoe's report is in the nature of a documentation whose importance lies in the fact that not much outside Puri, Bhubaneswar and Konarak was known at that time in the world of the European Indologists.

W.W. Hunter's *History of Orissa*, published in 1872, takes little notice of the architecture of Orissan temples. Instead he puts emphasis on their historical background and religious importance. He draws his information from temple chronicles and popular legends to prepare his account. He takes the Yavanas, who according to the temple archives in Puri ruled for 146 years in Orissa, no other than the Greeks and believes that they taught the children of the soil all the fine arts including the employment of stone in architecture. The assertion of Hunter is in keeping with the prevailing European feeling of superiority over the natives and the conviction that every manifestation of art was subordinate to Greek classicism. It is, therefore, no wonder that Hunter while appreciating the beauty of the Sun temple at Konarak refuses to admit the indigenous origin of its sculptures. In his opinion, 'the Grecian type ... may even be traced in the exquisite profile of the Sun temple, built in the 12th century A.D., on the remote coast of Orissa.'

Shortly after Hunter, in 1876, James Fergusson brought out his *History of Indian and Eastern Architecture* in two volumes. It exhibits considerable rise in the level of knowledge about the temple architecture of Orissa. The increasing corpus of inscriptional records tended to place the history of Orissa on a firmer footing. Fergusson utilised the newly acquired information to correct, in his way, many wrong notions about the chronology and, therefore, the evolutionary sequence of Orissan temples. Declaring his reservation about local chronicles and faith in the inscriptional source, Fergusson comments, '... like other native histories, it cannot stand examination, and must be discarded as worthless previous to the 12th century, and very inaccurate even for the last four or five centuries. Here as elsewhere, we can hope for trustworthy historical information only from the steady pursuit of epigraphical research...' Fergusson noticed the 'almost absolute contrast' the Orissan architecture presents to the Dravidian at the southern end of the peninsula. The points of contrast, in his opinion, "bring out more clearly the vast importance of ethnography as applied to architecture. That two peoples, inhabiting practically the same country, and worshipping the same gods under the guidance of the same Brahmanical priesthood, should have adopted and adhered to two such dissimilar styles for their sacred buildings, shows as clearly as anything can well do how much race has to do with these matters, and how little we can understand the causes of such contrasts, unless we take affinities or difference of race into consideration." This is a significant realisation though Fergusson did not go beyond this statement to apply ethnology or more appropriately anthropological methods to the analysis of Orissan temple architecture.

Till the time of Fergusson, studies on Orissan temples were confined to the documentation and description of individual temples not as the

representation of a style but as a complete whole. With him began the era of identification of typical features, analysis of character, recognition of stylistic pattern and reconstruction of the evolutionary process of Orissan temple architecture. Fergusson holds that 'the Orissan group forms itself one of the most complete and interesting in all India.' He further says, "Altogether there is not, perhaps, any group which, if properly investigated, would add more to our knowledge of Indian architecture, and give it more precision than the Bhubaneswar temples."

Fergusson restricted himself to the study of some important monuments of Bhubaneswar for illustrating the stylistic pattern of Orissan temple architecture. To him the style steadily progresses without admixture of foreign elements from the erection of the temples of Parasuramesvara and others, perhaps in the 7th century, to that of Jagannatha at Puri, A.D. 1100. For arranging the temples in a chronological order he depended on 'illustrations of a survey or some epigraphical guidance.' Admitting that his arrangement was subject to revision, Fergusson says, "With only such photographs as are available to depend upon, we can come to no satisfactory conclusions: at best they give only a partial, literally one-sided view of a building, and to ascertain its age, we ought to be able to look all round it, and make ourselves familiar with its locality and surroundings. The thing will not be satisfactorily done till some visits Orissa who has sufficient knowledge of the principles of archaeology to arrange the temples in a chronometric order." He is more precise regarding the requisites for reconstructing the chronology of temples belonging to a given style when he says, "With a moderate knowledge of the science of archaeology and accuracy of observation it is not very difficult to arrange the temples in some sort of approximate sequence determined by careful study of the styles." Thus what he had gained from his knowledge of archaeology and observation led him to assign the Parasuramesvara to the 7th /8th century A.D. The determining factor is its style which Fergusson has not clearly defined. Whatever be the reasoning of Fergusson, the generally accepted date for the Parasuramesvara is not far removed from the one suggested by him. To Fergusson, the presence or absence of miniature towers on the main tower constituted the major consideration for ascertaining the age of a temple. In his words: 'almost all the ornaments on the facades of Buddhist temples are repetitions of themselves; but the Hindus do not seem to have adopted this system so early, and the extent to which it is carried is generally a fair test of the age of Hindu temples. In the great Pagoda (Lingaraja) there are eight copies of itself on each face, and in the Rajarani the system is carried so far as almost to obliterate the original form of the temple.' Hence the Rajarani is later than the Lingaraja. On the same consideration, he is inclined to date the Lingaraja in a later period than that of the the Sari Deul and the Mitresvara which have no *angasikharas*.

Whatever may be the value of the chronological table of Orissan temples, prepared by Fergusson, he was the pioneer to define them as representing an architectural style with individual features and characteristics.

Fergusson realised that his observations, formulated on the examination of the temples at Bhubaneswar alone, were tentative and needed to be verified by the knowledge of monuments of a wider area. To this direction worked J.D. Beglar, who under the general supervision of Sir Alexander Cunningham, surveyed extensive areas in Orissa in 1874-75 and 1875-76 and discovered a large number of hitherto unnoticed temples (*ASIR*, XIII). Himself an alumni of Bengal Engineering College, he was more concerned with the structural than with the stylistic aspect of the monuments. To him, the temples were individual monuments and seldom the members of a fraternity bound by a common denomination. As a civil engineer, Beglar was particular about their plan, elevation and section. Remaining true to the maxim that 'drawing is the language of architecture,' he made copious scale drawings of ground plans, vertical sections and elevational details of a large number of temples he had surveyed. In many instances, he took note of sculptural embellishments and the iconography of images, often without understanding their nature. Reference may in this connection be made to the 64 Yogini temple at Ranipur-Jharial. Besides, dealing with the architectural features of the temple, Beglar gave a meticulous account of the extant images including their iconography and stances. On verification, Beglar's report on Ranipur-Jharial was found to be surprisingly accurate. What is inexplicable is that Beglar did not attempt to fix the precise date of any temple noticed by him. Be that as it may, his descriptive account while expanding the geographical horizon of Orissan temple architecture, constitutes a valuable source material for all researchers in this field.

For a long time after Fergusson and Beglar, western scholars could not open any new vista in the researches on Orissan temples. M.H. Arnot's *Report with Photographs of the Principal Temples at Bhubaneswar*, published in 1903, is a valuable photographic document but it adds not much to what Fergusson already wrote. However, Arnot's work establishes that cataloguing of temples with notes and photographs has its own value for the study of temple architecture of Orissa.

In 1924 Percy Brown published his celebrated *Indian Architecture (Buddhist and Hindu Period)* which contains a long chapter on Orissa. Meanwhile considerable progress was made towards the understanding of the nature and character of Orissan temple architecture by the efforts of Indian scholars. Benefited by the accumulated knowledge of the past, Percy Brown attempted to delimit the geographical boundary and the area of influence of Orissan temple architecture. As he says, "Apart however from the central development, a considerable distance along the coast

towards the south, as far away as Ganjam within the Madras Presidency, there is a small group in this style at Mukhalingam, which has no little significance. In the other direction from Bhubaneswar, towards the north, an offshoot of the movement is to be found in a series of ruined shrines in the state of Mayurbhanj between Orissa and Bengal, while still further north-eastern direction, parallel to the coast line of the Bay of Bengal, this type of temple is fairly common." His characterisation of Orissan temple architecture is an elaboration of Fergusson's description. Like Fergusson, he concentrates on Bhubaneswar, Puri and Konarak and arranges the temples of these places into three groups, viz. Early (c. A.D. 750-900), Middle (c. A.D. 900-1100) and Later (c. A.D. 1100-1250). The principal criterion for this group division was style. Percy Brown was aware that 'the Orissan mason has a technical name for every section, member and moulding' but he made a minimum use of such names as in his opinion, 'except to the actual workmen, many of these serve no useful purpose and a full list would only confuse.'

Notwithstanding his reliance on style as the most important factor in architecture, Brown occasionally resorted to a metric analysis for detailing structural features. Thus while describing the *jagamohana* of the Sun temple at Konarak, he writes, "At first sight presenting an appearance of infinite elaboration, reduced to its lowest terms it resolves itself into a comparatively simple formulation as it consists of two main elements, a *bada* or cubical portion, and its pyramidal superstructure or roof (*pida*) ... The proportions of this edifice are conspicuously simple, as the main cornice marks the centre of the structure, the width of the *bada*, or cubical part, is twice its own height, and the entire width of the building is equal to its altitude. Other dimensions are similarly uninvolved." He also took its constructional technique into consideration and wrote, "The courses of laterite are not bonded with mortar, as the masonry is of the dry order, but they are held together mainly by a system of counterpoise, the weight of one stone acting against the pressure of another, much of the stability being a matter of balance and equilibrium. In the case of the *deul* or tower, to counter-act any lateral thrust the entire structure was weighted at the summit by means of the massive melon-shaped disc or *amla*... The ceiling of this hall (i.e. the *jagamohana*), which followed the pyramidal shape of the exterior, was a remarkable effort of construction, as it was corbelled out by means of oversailing courses of masonry, each course projecting beyond the one below, thus enabling the sides to converge gradually towards the crown. This system was not sufficient in itself, and stone lintels were introduced to be carried on four solid piers. But even this arrangement was not considered adequate support for such an immense superstructure, and, accordingly, a very ingenious plan was devised to supplement it. Each laterite lintel was reinforced by a number of wrought iron beams, while many others, like girders were disposed

about the ceiling, the whole forming an iron grid, or framework, of great strength." These extracts are enough to show that Brown understood the importance of structural analysis while studying a temple, but to him style was of primary importance. He, therefore, did not seek help from constructional features to ascertain the age of a temple. In consequence, Brown was unable to proceed much forward from Fergusson so far as methodology is concerned.

In 1946 came out an outstanding work, *The Hindu Temples* by Stella Kramrisch in two volumes. Raising Havell's metaphysical explanation almost to an esoteric level, Kramrisch gave a new turn to the study of Indian temple architecture of which Orissan temples were a most significant expression. Summarising her understanding of Indian temples, she writes, "An attempt has been made here to set up Hindu temples conceptually, from foundation to its finials. Its structure is rooted in Vedic tradition, and primeval modes of building have contributed their shapes... The principles are given in the sacred books of India and structural rules in the treatise on architecture... Nothing that is seen on the temples is left unsaid in the verbal tradition nor is any of the detail arbitrary or superfluous. Each has a definite place and is part of the whole.

"The Hindu temple is the sum total of architectural rites performed on the basis of its myth. The myth covers the ground and is the plan on which the structure is raised." Thus to Kramrisch, architectural history became a means of investigating into the history of Indian thought and civilisation. But notwithstanding the profound penetration she has shown, the conclusions made by her can not be subjected to a scientific verification.

Charles Fabri in his *History of the Art of Orissa*, published in 1974, ventured the coverage of some major aspects of Orissan art history including architecture. He proceeds with the belief that Orissan temple architecture had a Buddhist background and that many Brahmanical temples, particularly brick-built, were originally Buddhist. He did not appreciate the fact that Orissan temples are the result of a historical process remotely connected with Buddhism and that the nature of construction of the brick temples of Orissa stood on the way of their later remodelling in the way suggested by him. Fabri's another assumption that the influence of Orissan temple architecture was felt in the whole of northern India points to his refusal to follow the evolutionary sequence of Indian temple architecture in its regional manifestations. His western mind encouraged him to interpret Orissan temple architecture in terms of European art idioms. Thus he discovered the unfolding of Baroque in the Muktesvara and its fulfilment in the Lingaraja. In his perception, "The wondrous, the marvellous, the astonishing—all these are characteristic elements of baroque and romantic art." And all these elements, Fabri finds

in the temples of the period from A.D. 900 to 1200. Such vague assertions permeate his entire work to erode its value.

In the seventies, under the sponsorship of the South Asia Institute of the University of Heidelberg, started the Orissa Research Project with a socio-ethnological bias. The result of this research has been embodied in *The Cult of Jagannatha and the Regional Tradition of Orissa* (1978). This book contains a chapter on the 'Early Temples of Jagannatha in Orissa: The Formative Phase', written by H. von Stietcorn. Here the author went through the local chronicles, studied the morphology of the Indradumnya legend and examined the contents of relevant inscriptions to determine the age of the Jagannatha Temple and its adjuncts. Though Stietcorn did or could not take into account the architectural features, he was able to show that a critical review of the legends could be fruitfully exploited for fixing the date of a temple.

The researches of more than a century were climaxed by T.F. Donaldson's *Hindu Temple Art of Orissa* in three bulky volumes. These three volumes were published respectively in 1985, 1986 and 1987. In her editorial preface to the first volume, Janice Stargardt summarises the objective of the author in the following words "he looks at the internal evidence of the monuments to trace an Orissan stylistic vocabulary whose significant changes have chronological as well as regional connotations." Donaldson himself writes, "The major objective of this study will be to focuss on the overall features and decorative program of temples throughout Orissa in an attempt to refine and improve upon the general trends and chronological sequence established by earlier writers for the temples at Bhubaneswar." In refining the chronological evolution of temple construction, the author says that emphasis has been focused on individual architectural features and the decorative components of each temple because 'it is only by looking at these individual elements that we can adequately plot the stylistic development of Orissan temple art.' He gives more importance to the exterior decorative programme than to architectural problems concerning stress or support. He proceeds with the belief that for the most part, the construction of temples were based on one fundamental principle, as outlined in the *Silpasarani* — the *mulasutra* or *mulabhaga* which are of three kinds, viz. the highest, based on the height of the temple; the middle, based on the *musti* (cubit taken of the fist) of the *sutradhara* or *yajamana*; and the lowest, based on the plinth of the temple. He goes on to say that the most favoured *mulasutra* appears to be the height of the plinth. In his opinion, as a general rule-of-thumb the *jangha* is approximately twice the height of the *pabhaga* while the *raha* niche is of the same approximate height. Thus if only the *pabhaga* of a temple has survived, from any of the various periods of activity, the approximate height of the *bada* can be determined, excluding the *baranda*.

In developing a chronological evolution and stylistic analysis of the Orissan temple and its decorative programme, Donaldson's aim was to treat the monuments individually in a broad chronological and regional sequence taking note of the stylistic evolution and changing iconographic programme of select individual features, motifs and sculptures and emphasising continuity and change as well as regional variations and external influences filtering into Orissa.

After Beglar, Donaldson is the only non-Indian to undertake extensive survey of Orissan temples. Unlike Beglar, he did not stop at a descriptive account of these temples. Indeed, we may find in him the combination of a field surveyor like Beglar and a scholar on historical architecture like Fergusson. The experience and knowledge, accumulated through a century of sustained research, coupled with his own critical mind enabled Donaldson to improve, to a great extent, upon what his predecessors had done in the domain of Orissan temple architecture. From the data, he had collected, he realised that the temple architecture of Orissa is the cumulative result of influences from various sources. The evolution of this multi-faceted architectural style he traces through an elaboration of form, increase in the height of the spire in relation to that of the plinth, changes in the iconographic features and programme, sculptural standard and so on. He relies heavily on the *Silpasarani* for deriving information about the principles of Orissan temple architecture, depends too much on the *Bayacakada* for reconstructing the history of the Sun temple at Konarak and draws largely upon the *Silpaprakasa* for preparing the nomenclature of the components of Orissan temples. In his scheme, the constructional side of architecture assumes little significance and dynastic appellation for periodisation of its history becomes inappropriate.

The appreciation of the fact that the temple architecture of Orissa absorbed elements from different sources notwithstanding, Donaldson in his eagerness to isolate individual local features overlooked complete sub-regional schools within the broad framework of a common Orissan style. Again, such texts as the *Silpasarani*, *Silpaprakasa* and *Bayacakada* are of doubtful authenticity and Donaldson's dependance on them makes much of his work of questionable value. His avoidance of the constructional side of architecture is a major flaw in his approach. The temple is basically a structure built according to certain rules of construction to serve a utilitarian purpose. To ignore this fact in any work on architecture is to make it of less worth. Donaldson did not appreciate it. Hence we do not find any section drawing in his work. Nor do we notice any attempt towards a metric analysis for ascertaining the chronological sequence of temples. He documents the images in the principal and subsidiary niches on the *bada* and takes note of their iconographic changes. This exhaustive documentation is not supplemented by the identification of placement

scheme of images which is known to have varied according to the changes in time and space. By criticising K.C. Panigrahi, Donaldson groups temples of specific styles within date brackets instead of associating them with ruling dynasties of the time. This mode of periodisation becomes meaningless when he identifies periods with dynasties. On the whole Donaldson's monumental work while contributing a lot to our knowledge leaves much to be desired.

THE DOCTRINE OF ATMAN - A STUDY IN THE ORIGINS

N. N. Bhattacharyya

The culminating point of the Upanisadic philosophy was reached, as is known to all, with the recognition of *atman* as the highest cosmogonical principle and its equation with *brahman*. With the general enlargement and universalizing of the concept of *brahman*, not only everything associated with the world-ground was gradually identified with it, but also it was felt that this world-ground was in some sense a soul, correlated with the finite ego. The idea of *brahman* was conceived not only as the essence of the cosmic phenomena, but also as that of the organic and mental functions of the human person. There are many passages in the Upanisads in which attempts are made to correspond parts of the bodily self with those of the world (cf. *Brhadaranyaka*, I.2; *Chandogya* III.18.2; *Aitareya* I, etc.). After this correspondence was made, the next step, with the development of abstract thought, was probably to consider the world as really a soul (*atman*), a universal soul, of which the individual was a miniature.

Theory of *atman* was not a development subsequent to that of *brahman*. The two progressed simultaneously and influenced each other until their final union. It is not impossible that originally *atman* was a relative and negative conception denoting the man's own body as contrasted with the world outside, and later the term came to signify one's own proper self or essence. The word *atman* may be variously derived. It may be derived from *an*, meaning 'to breathe' from whence it came to signify life or soul, and figuratively, the self or essence of a thing. In this sense the word has been used three or four times in the *Rgveda*. It may also be derived from *at* meaning to wander, to move, with a presumable reference to the wandering of the soul and the concept of transmigration. Deussen thinks that the word *atman* is a euphonically extended form of *tman*, meaning 'that = t me = ma' signifying one's own proper self or essence.

The origin and develop of the concept of *atman* should be viewed in terms of various cosmogonical speculations of the Vedic age which had sought to know things as they were and to find out common origin of the diverse phenomena of nature, in nature itself. The starting point was a unique First Principle, originally physical in character like earth, water, etc. In the famous creation hymn of the *Rgveda* (X. 129) the question is raised whether the fathomless waters existed before the formation of the world and the answer is given in the affirmative. Thus the waters are said to have given birth to Agni or fire (III. 1.3, III. 94, X.2.7, X.91.6), to Savitr or Sun who is sometimes called apam-napat (X. 149.2), to

Aditi, the mother of the luminaries and also of the gods (X.63.2) and to Dyava-Prthivi, i.e., Heaven and Earth (X. 185.1). The mythological metamorphosis of this primitive empiricism is found Rgvedic conception of Hiranyagarbha or Golden Germ emanating from the primeval waters (X. 121) which is described as the lord of all things upholding heaven and earth. To this incipient source of existence, floating in the form of World Egg on the primordial waters were infused the personalities of two divinities, Prajapati and Visvakarman, and later the abstract principle *atman*, when the earlier anthropomorphised divinities were found inadequate to explain creation as an actual physical process. The space requires to have dissipated itself into the wind and other elements, the water to have hardened itself into the earth, the fire to have perspired itself into the water, and so on. This could only be possible if the elements in question had the inner potentiality of such transformation and if that potentiality could be viewed in terms of their own self or *atman*. When creation was regarded as an actual physical process the qualities of *atman* were transferred into the created objects in which cases attention was naturally focussed upon such qualities as were common to cause and effect, to establish a relation of identity between the two.

This is indicated in certain passages of the *Satapatha Brahmana* (X. 6. 25.5) which seek to explain the identity in essence of the self within and the self without. In the *Aitareya Aranyaka* (II. 1-3), *atman* is conceived as the five-fold *uktha*, the outer portion of which is formed by the earth, the wind, the ether, the waters and the luminaries, and the inner portion by the body, the breath, the apertures, the blood-mucus-seed, and the warmth. So far as the Upanisads are concerned, in the *Katha* (IV. 6), *atman* is spoken of as born of old from the waters, while in the *Aitareya* (I. 1. 3) it is stated that the *atman* after creating the waters drew forth from them a person from whose limbs the different parts of the world came into being. This reminds us of the Purusa-sukta of the *Rgveda* (X. 90), a ritualistic interpretation of creation, wherein it is stated that the regions sprang from the Purusa who became diffused everywhere among things animate or inanimate. The Brahmana was his mouth, the Rajanya his arms, the Vaisya his things and the Sudra his feet. The moon was produced from his soul, the sun from his eyes; Indra and Agni from his mouth; Vayu from his breath; atmosphere from his navel; sky from his head; earth from his feet; and the four quarters from his ears.

Even in the Purusa-sukta the idea of equation of one faculty of nature with another and their eventual identification with a macrocosmic principle is found which contributed a great deal to the subsequent notion that the human body is the microcosm of the universe. But the equation of one faculty with other is not possible if their gross aspects are taken into account. It is possible only in the abstract level insofar as the qualities

or essences are concerned. That is why the earlier physical conception of Purusa underwent significant change in subsequent period. It was made bodiless and eventually identified with *atman*, the inner self of all beings. In the *Mundaka Upanisad* (II. 1-10), Purusa is conceived as a primeval person who is heavenly (*divya*), formless (*amurta*), breathless (*aprala*), mindless (*amanas*) and pure (*subhra*).

From it are born in order life, mind, senses, ether, air, light, water and earth. In the *Svetasvatara* (I.2) Purusa is mentioned as the First Principle, described as the macrocosmic person with superhuman powers (III. 11-19), often endowed with an animistic subtle corporeal appenage of the size of the thumb (cf. *Katha* IV. 12-13) and an identical with the inner soul or *antaratman*. The earlier passages of the Upanisads equate the cosmic elements like fire, sun, etc., with the head, eye and other limbs of the Purusa while the later passages turn each of the elements into a Purusa controlled by the *atman* residing in all of them. The transition from the category of Purusa to that of *atman* is clearly shown in many passages of the Upanisads. In the *Brhadaranyaka* (I. 4) it is stated that in the beginning this world was *atman* alone in the form of Purusa; it was afraid of its lonely existence and so divided itself in two parts, male and female. The *atman* is called purusa because it has the capacity to burn (*us*) all sins (*papman*) whatsoever. Elsewhere in the same text (III. 9.26) *atman* is designated as the Upanisadic Purusa. The Purusa in the earth and that in the body are same, both are alike declared to be no other than the immortal *atman* or *brahman* (*ibid.* II. 5.1. ff.). In the *Chandogya* (III. 12.7.) the space within the Purusa is equated with that within the heart.

In view of what has been said above, it is amply demonstrated that the conception of *atman*, as the highest cosmological principle, had to pass through many stages of thought. In the *Chandogya* (V. 11-18) the sky, the sun, the wind, the space and the waters are equated respectively with the head, the eye, the breath, the body and the bladder of *atman*. The *Brhadaranyaka* (I.4.7) and the *Maitri* (VI. 7' VII. 7) identify *atman* with all gods and powers. elsewhere in the *Brhadaranyaka* (V.2) all things, cosmic and personal, are mutually correlated and identified with the *atman*. In the next stage *atman* is conceived as the unitary world-soul, the immanent reality of all things *Chand*, VI. 9-16, *Svet* - I.15; IV. 2-7). Under such diverse processes *atman* gradually stepped towards becoming the ultimate basis of the manifold world and of the individual. According to a passage of the *Prasna Upanisad* (IV. 7-9) : "As birds resort to a tree for a resting place, even so, O friend, it is the *atman* which is the resort of everything - earth, water, fire, air and space with their corporeal and elemental substances, sight and what can be seen, hearing and what can be heard, smell and what can be smelled, taste and what can be tasted, skin and what can be touched, speech and what can be spoken,

hand and what can be taken, sex organ and what can be enjoyed, anus and what can be excreted, feet and what can be walked, mind and what can be perceived, intellect and can be conceived, ego and what can be connected with I-ness, thought and what can be contemplated, brilliance and what can be illuminad, life-breath and what can be supported - truly the seer, toucher, hearer, smeller, thinker, conceiver, doer, is the conscious self, the person whose resort is the supreme imperishable soul, the *atman*. In the *Brhadaranyaka* (II.5.III.9.10-17) longer descriptions of *atman* as the basis of the unity implied in the usual correlations of the non-self and the self are met with as the precondition of the final identification of *atman* with *brahman*. After the identification was made the two became interchangeable terms. As is said in the *Chandogya* (III.14.4); 'Containing all deeds, all desires, all smells, all tastes and encompassing the whole world, the unspeaking, the unconcerned - this my *atman* in my inmost heart is this *brahman*'. But it is clear from the Upanisadic evidence that before their final identification the two terms hovered near each other as designations of the ultimate world-ground. The Upanisads give a hierarchy of different grades of reality down from the all-embracing absolute. In the *Taittiriya* (II.4) it is stated that from the self sprang the space, from space air, from air fire, from fire water, from water earth, from earth herbs, from herbs food, from food seed and from seed man. Several elements of the cosmos are found in the nature of the individual. *Prana* corresponds to *Vayu* the breath of the body to the wind of the world, *manas* to *akasa*, the mind of man to the space of the universe, the gross body to the physical elements. The same text (III. 1) asks : 'From whence verily all these beings spring forth; through whom, having sprung forth, they continue alive; unto which they reair; and into whom they are absorbed ?' The answer is given in terms of a First Principle, subject to restless shift, but capable of producing the effect, like water hardening itself into the earth. This restless shift is indicated variously in the Upanisads in terms of a steady but multifarious advance from a concrete physical First Principle like earth or water to a non-material principle like *akasa*, to a ritualistic principle like *Purusa*, to a theistic principle like *Prajapati* or *Visvakarman*, to a physiological principle like *prana*, but ultimately to the all-embracing psychophysical principle like *atman*, revealing the macrocosm in the microcosm, the individual self equated with *brahman* or universal self, the last being the culminating point of the process.

SOME ASPECTS OF THE DEVELOPMENT OF THE BENGALI SCRIPT

Amitabha Bhattacharyya

The earliest specimen of writing from the region in which the Bengali script¹ is now used had come to light from Mahasthan in the Bogra District of Bangladesh. It is a fragmentary inscription on a stone plaque written in Brahmi characters of about the third century B.C.² Prevalence of Kharosti and that of a mixed script (consisting of letters in Brahmi and Kharosti) in Gangetic West Bengal seem to be vouchsafed by the recently deciphered inscriptions on earthen pots, sherds and seals unearthed from mainly Chandraketurah and the adjoining regions in the district of North 24 Parganas of West Bengal. On palaeographical grounds they can be ascribed to the period between c. first century A.D. and first half of the fifth century A.D.³ The Kharosti script was imported by the people or communities, accustomed to North-Western Prakrit, who had traversed all the way through hills and plains from the north-west to the lower reaches of the Ganga for trading purpose and ultimately settled as a political force in ancient Vanga.

The region specified in the beginning has also yielded an epigraph in Shell characters.⁴ It is inscribed on the wall of the Susunia hill cave (Bankura District, West Bengal) which bears the well known inscription referring to Candravarman of Puskarana⁵, a contemporary of the Gupta emperor Smudragupta. The contents of the Shell inscription indicate that it was engraved not before the epigraph alluding to Candravarman had been executed. An earlier instance of the use of Shell script seems to be illustrated by the legend on a seal from Chandraketurah datable to the third century A.D.⁶ The Kharosti and the Shell characters, however, had nothing to do with the development of the Bengali script.

The large number of inscriptions in Arabic and Persian, discovered from different corners of the region within our periphery, have not been taken into consideration because of their heterogeneous character. The inscriptions which are considered to be of more importance and pertinent to the study of the development of the Bengali script have come to light from the northern sector of Bangladesh. They belong to the fifth century A.D. and a few of them are written in a cursive manner to some extent. The characters belong to the eastern variety of Late Brahmi, the test letters being *ma*, *la*, *ṣa*, *sa* and *ha*. Developments of the forms of the relevant letters can be traced from the Allahabad Prasasti⁷ composed by Harisena, though the use of *sa* of the so-called eastern variety is noticeable in earlier epigraphs. The western boundary of the geographical region in which the eastern variety of the Late Brahmi was prevalent in the fourth

and fifth centuries of the Christian era, cannot be defined by the logic of findspots of the relevant records. Inscriptions from the same site and attributable to the same reign period sometimes indicate varieties distinct from each other. A glaring example is furnished by the two inscriptions from Udaygiri near Bhilsa in Madhya Pradesh.⁸ Both of them were inscribed during the reign of the Gupta emperor Candragrpta II. Nevertheless, while the undated document, referring to Virasena, represents the eastern variety, the other dated in the (Gupta) year 82 betrays a different one.

Specimens of writing in the sixth century A.D. are furnished by (1) the Gunaighar inscription dated in the (Gupta) year 188,⁹ (2) Jayrampur (Balasore District, Orissa) copper plate grant of the year 1 or the reign of Gopacandra,¹⁰ (3) Mallasarul inscription of the year 33 (or 3) of the reign of the same king,¹¹ (4) land grant documents of the reign of Dharmaditya, Gopacandra and Samacaradeva from the Faridpur District of Bangladesh¹² and (5) the Damodarpur copper plate dated in the (Gupta) Samvat 224.¹³ The Barabar and Nagarjuni cave inscriptions of Anantavarman,¹⁴ the Amauna grant of Nandana¹⁵ and the Bodhgaya inscription of Mahanaman¹⁶ dated in the year 269 (of the Gupta era) from the adjoining region, now in Bihar, should be considered for a proper understanding of the successive stages of the development of the Bengali script. The letters in most of these records are characterised by bold head marks, while some of them in the inscription of Mahanaman are crowned by thick triangles though their right hand verticals do not bend.

Epigraphic records of the seventh century A.D., however, exhibit remarkable developments in the style of writing. The Tippera copper plate of the reign of Lokanatha dated in the year (3) 44 (of the Gupta Samvat),¹⁷ the Kailan inscription of Sridharana Rata¹⁸ and the Asrafpur copper plate of the time of Devakhadga¹⁹ fully illustrate these new trends. The best example of the new style is the document from Apsad belonging to the reign of Adityasena (c. A.D. 660-75).²⁰ The letters in this record seem to hang down from nail-headed solid triangles and their right hand verticals incline to bend down at the bottom. The script had been described by Prinsep and Fleet as *Kutīla*.^{20a} In fact the Dewal Prasasti, dated (Vikrama) Samvat 1049,²¹ refers to a certain Taksaditya. He was a Karana hailing from the Gauda country and had expertise in Kutīla letters. The *Prasasti*, composed by Nehila, was drafted by Taksāditya and engraved by Somanatha who belonged to Kānyakubja. There is, however, controversy with regard to the interpretation of the expression *Kutīl-ākṣarāṇi-vidusā* (instrumental) attributed to Takṣāditya. The term *Siddhamātrikā*, used by al Beruni to designate the script of North India has been preferred to that of Kutīla.²²

Inscriptions from eastern India in general, written in Siddhamātrikā of the seventh century A.D., bear the looped variety of *ka*, curved form of *ja* with the upper limb merged with the head-mark, *ṭa* developing a downward tick at the end of the flat top, *na* with the outer arms growing longer and *ra* developing a tail at the bottom. Of the other forms used in the inscriptions concerned, *sa* bears a triangular loop, *la* an inner curl in its left hook while the acute angles in *pa* and *ma* get sharpened. The medial vowel marks for *i* and *ī* hang down to the bottom of the parent letters and the tick at the right end of medial *a* lengthens down. The left curves of the initial vowels *u* and *o* extend upwards.²³

The next stage of the development is illustrated by the Khalimpur inscription dated in the year 32 of the reign of Dharmapala,²⁴ Monghyr²⁵ and Nalanda²⁶ copper plates of the reign of Devapala and the inscription of the reign of Mahendrapala discovered recently at Jagjibanpur (Malda District).²⁷ They are characterised by *a* with vertical line on the right, *au* with an upward curve on the right of *o* having rounded angles and a tailed variety of flat topped *e*. Of the consonants, *kha* has sometimes been represented as open mouthed with a bar joining the right vertical and *ṭha* possessing a head-mark from which the globe hangs down. The letter *na* is open mouthed with its base sloping and right outer curve angular. Both the looped form and the Nagari variety of *sa* are noticeable. The other peculiarity of the written documents of this phase is representation of conjuncts in which the original letters cannot be easily recognised as in the cases of *kṣa*, *kṣma* and *nna*. The basic problem was the vertical space allotted for the conjuncts for which either the initial fraction of the first member had to be represented or the succeeding member be twisted horizontally. This phenomenon was one of the factors at work behind the formation of typical conjuncts in Bengali in which the original letters are sometimes irrecongnisable.

The Siddhamātrikā script is said to have been prevalent in Bengal up to the end of the tenth century A.D. Epigraphic records of the Palas and those of their East Indian contemporaries, ascribable to the ninth and tenth centuries of the Christian era, are written in this script. Al Beruni, in the first half of the eleventh century, noticed the prevalence of the Siddhamatrika in Kashmir, Varanasi and in Madhyadesa, i.e., 'the Middle Country, the country all round Kanauj, which is also called Āryā vartā'. While enumerating the sub-regional scripts, al Beruni mentions *inter alia* Gauri (i.e. Gaudī), used in Pūrvadesa or the Eastern Country.²⁸

Al Beruni was evidently wrong in equating Madhyadesa with Āryāvarta. In the eleventh century Madhyadesa, no doubt, included the Gangetic Doab (Antarvedi of Rājasekhara)²⁹ but Āryavartā had already

acquired a wider denotation spanning the entire region between the Himalayas and the Vindhya and from the western to the eastern ~~see~~ Pūrvaśeṣa, however, lay to the east of Varanasi. Nevertheless, in matter relating to geographical distribution of the sub-regional scripts of India Al Beruni seems to have had been influenced by the information given in some early indigenous texts like the *Bauddhāyana Dharma-sūtra* according to which Āryāvarta was practically coterminous with Madhyadeśa defined by Manu.

Al Beruni's statement, if taken in its face value, would indicate that the script of eastern India had developed certain characteristics which were distinct from those of the rest of northern India. The Gaudī has been regarded as the same script to which is given the appellation 'Proto-Bengali'.³⁰ In that case it must be conceded that the Proto-Bengali script had evolved by the beginning of the eleventh century A.D. The actual difference between the Siddhamātrikā and Gaudī of the first half of the century is rather difficult to find out. We have a number of inscriptions and a few manuscripts belonging to the reigns of the Palas and the Candras which can be ascribed to the period between c. A.D. 875 and c. 1025. In the Narayanpur Image³¹ and Bangarh copper plate³² inscriptions of the reign of Mahipala I the head-marks in the form of solid triangles persist and the right hand verticals continue to bend. A tendency is, however, perceptible to close down the open mouth of such letters as *pa*, *ma*, *ya* and *sa* by lengthening the head-mark horizontally. This phenomenon can be traced in the Badal Pillar inscription of Narayanapala³³ who can be placed in the last quarter of the ninth and the first quarter of the tenth century A.D. The characteristics of Gaudī were thus in existence, although in rudimentary forms, in the beginning of the tenth century. In some of the records of this period, e.g., the Rampal copper plate of the reign of Sricandra, the head-marks appear to flatten to some extent in comparison to the thick triangle-heads referred to above.³³ Flattening of the serif becomes more prominent in the Imadpur (Muzaffarpur District, Bihar) Image inscription³⁴ dated in the (regnal) year 48 of the reign of Mahipala I, and in the Bangarh³⁵ and Siyan³⁶ inscriptions of the reign of Nayapala. These epigraphs can be considered as belonging to the second quarter of the eleventh century A.D.

An important landmark in the development of the Bengali script is the Ramganj (West Dinajpur District, West Bengal) copper plate inscription of Mahamandalika Isvaraghosa dated in the (regnal) year 35.³⁷ On palaeographical grounds the record can be placed in the last quarter of the eleventh century A.D.³⁸ Some of the characters employed in it are of immense importance. It is the earliest epigraph from Bengal which bears the letter *ta* with a tick rising upwards. The full-vowel *i* develops

a tick at the right end of the upper horizontal bar above and *a* a curved hook below. Initial *o* takes a form which approaches the modern Bengali character. In line 35 of the inscription the character for initial *ī* has been used in the word *īti* (*iti*) due to either the mistake of the scribe or the system of pronunciation in which distinction was hardly made between *i* and *ī*.

A manuscript, dated in the 39th regnal year of Harivarmadeva (c. A.D. 1073-1127) may be mentioned in this connexion. One of the folia of the manuscript contains the forms of the full vowels while the other bears the characters for the consonants. The dominions of Harivarman were confined to 'East Bengal'. The manuscript was apparently written down or copied somewhere within his kingdom. The forms of the letters may, therefore, be taken as faithful representations of those used in Bengal in the first quarter of the twelfth century A.D. The initial vowels, appearing in the record, are *a*, *ā*, *i*, *ī*, *u*, *ū*, *ṛ*, *ṛi*, *l*, *li*, *m* (in association *a*), *h* (in association with *a*), *e* and *ai*. The full vowel *i* has been formed by connecting the two circles and adding a short diagonal tick over the horizontal bar. *ī* develops a tail below. *ū* has been formed by appending a tail to the form for *u*. This is the first and solitary record of early medieval Bengal which bears the forms for *ṛi*, *l* and *li*.³⁹ The form for *ṛ* is also very rare, the earliest being noticeable in the Paschimbhag copper plate inscription of the year 5 of the reign of Sricandra (c. A.D. 925-75).⁴⁰ With regard to the consonants, it may be noted that it is the only written document of early medieval Bengal which records the full-fledged form for *ṇ*, elsewhere found invariably in conjunct with other consonants. Another notable feature is the form for *ṇa* conforming to that used in modern Bengali. It may be added that we have two more manuscripts dated in the year 8 of the reign of Harivarmadeva bearing the older form of *ṇa* or the form noticeable in the epigraphs of the twelfth century A.D.⁴¹

Flattening of the solid-triangled head-marks perceptible in the inscriptions of the first half of the eleventh century led to the developments of hooks issuing out of the left corner of the serifs. The letters seem to hang down from these hooks. They are clearly visible in the epigraphs of the twelfth century. The Belawa copper plate inscription of the year 5 of the reign of Bhojavarman (c. A.D. 1137-45)⁴², Deopada Prasasti of the reign of Vijayasena (c. A.D. 1096-1158)⁴³ and the Naihati copper plate of the year 11 of the reign of Ballalasena (c.A.D. 1159-79)⁴⁴ illustrate these characters. The other notable feature of the style exemplified in these documents is that the right hand verticals of the letters straighter down before taking a sharp bent at the bottom. The manuscripts of the eleventh and twelfth centuries from eastern India are also characterised by this feature, which appears to have relevance to the study of calligraphy, rather than to the direct development of the Bengali script.

The Belawa copper plate inscription of the year 5 of the reign of Bhojavarman happens to be the earliest epigraphic record from Bengal to bear the sign for nasal *candrabindu*.⁴⁶ The form is the same as we use it to-day. In the said inscription it has been used for writing *om* (o surmounted by the *candrabindu*). In the Anulia inscription dated in the year 3 of the reign of Laksmanasena, however, the *anusvara* has been dropped in favour of *candrabindu* for writing *kṣetra-karāṁśi* = *ca* and *anyāṁśi* = *ca* in ll. 33 and 32 respectively.⁴⁸

The Khalimpur inscription, dated in the year 32 of the reign of Dharmapala, bears a sign in l. 30 of the obverse which conforms to the form used in Bengali script for *anusvara*.⁴⁷ The text of the inscription indicates that it is apparently a mistake for the spirant (*visarga*). Nevertheless, it proves the prevalence of the sign in the beginning of the ninth century A.D. It may be regarded as an early instance of the use of the typically Bengali sign for the nasal glide. The sign for *khanda ta* in its rudimentary form is also noticed in the Khalimpur inscription (ll. 29 and 61).⁴⁸

Use of the hook, mentioned earlier, is found occasionally in the inscriptions of the thirteenth century. The serif or the *mātrā* happens to be in the form of straight lines. In the Edilpur⁴⁹ and Calcutta Sahitya Parishat copper plate inscriptions⁵⁰ the right hand verticals do not bend suddenly at the bottom though the tendency is found in the Mehar copper plate dated in the year 1156 of the Saka era.⁵¹ Nevertheless, the document from Mehar contains some characteristic forms relevant to the study of the development of the Bengali script. These are the forms for *pa* (also found in the manuscripts of the *Ramacarita* and *Caryagiti*), representation of the conjuncts *ksa* and *ka*. Specimens of writing available to us do not indicate any substantial development of the 'Proto-Bengali' in the fourteenth century.

A copper plate inscription of the reign of Vijayamanikya I,⁵² dated in the year 1410 of the Saka era (= A.D. 1478), furnishes us with valuable materials with regard to the characters prevalent in Bengal in the fifteenth century. The letters hang down from long horizontal lines similar to those found in the Biharsharif stone slab, dated in the year 1553 of the Vikrama Samvat (= A.D. 1496).⁵³ The medial vowel marks for *i* and *ī* approximate those used in modern Bengali, the lunate member in medial *i* being distinguished from the vertical bar. Among the consonants, *pa*, *na* and the ligature *hu* (*h* with medial *u*) attain to modern forms. The said inscription of Vijayamanikya I is the earliest epigraph in which *śa* has been represented with a pair of circles approaching the present figure. Attempts have been made to represent *ra* by either dissecting the triangle of *va* or incising

a pellet within the triangle or by an unqualified triangle.⁵⁴ These features of *ra* can be traced in the inscriptions of the Malla rulers also. In the Bishnupur Syamaraya temple inscription, dated in the year 949 of the Malla era (= A.D. 1643), the figure for *ra* in 1. 2 bears the blob located outside the triangle and below the lower rib on the left.⁵⁵ An earlier instance of the form is found in the manuscript of the *Karma-Vipāka* (Asiatic Society, no. G 807) bearing the date Saka 1517 (= A.D. 1595). Another manuscript of a text entitled *Khandanoddhāra* preserved in the Asiatic Society (no. G 1492) bears the same form for *ra*. It is dated in the year 1410 of the Saka era (= A.D. 1488). The overall appearance of and certain characters employed in the manuscript, however, indicate a later date. The date could have been that of the original manuscript from which the present one was copied down. Several manuscripts of the seventeenth and eighteenth centuries are known to us illustrating the form of *ra* which simulates the present shape of the letter concerned. The process of the development, however, was not an uninterrupted one. As late as the first half of the nineteenth century the older form of *ra* with bisected triangle is regularly found in manuscripts and inscriptions.⁵⁶

An epigraph from Wari (Malda District, West Bengal) dated in the year 1467 of the Saka era (= A.D. 1545) indicates full-fledged development of the letters like *ṛ*, *kha*, *gha*, *da*, *dha*, *s'a*, *sa* and that of the conjunct *nda*.⁵⁷ The ticks of *ta* and *tha*, however, hang down from the roof and do not surmount it. Inscriptions and manuscripts written in the seventeenth and eighteenth centuries represent sometimes older forms and sometimes new ones of the letters. Occasionally queer forms have been used, perhaps, due to either ignorance of the scribe or the system of pronunciation. Thus, the Kabilaspur (Birbhum District, West Bengal) inscription, dated in the year 1565 of the Saka era (= A.D. 1643) bears the figure for the conjunct *srī* (*s'ri*) which has been formed by juxtaposing vertically the letters *sa* and *ra* with sign for medial *ī* emanating from the middle of the vertical on the right.⁵⁸ The same method has been followed in writing *prī* in 1. 4 of the Sankari temple inscription at Khandaghosh (Burdwan District, West Bengal) dated Saka 1595 (A.D. 1673).⁵⁹ A strange form of *visarga* is found in the Madanmohan temple inscription at Raniyara (Bankura District, West Bengal), dated in the year 976 of the Malla era (= A.D. 1670).⁶⁰

✦ The *Code of Gentoo Law*, published from London in 1776, bears a chart of the Bengali alphabet. The forms of the vowels and the consonants are those which had been prevalent in Bengal in the second half of the eighteenth century. The vowels are sixteen in number including long *ṛi*, long *li*, *anusvāra* and *visarga*. The consonants number thirtyfour, the last letter being *khyā* (*kṣā*). The chart of the Bengali alphabet, appended to

the *China Monuments* published from Amsterdam in 1667, also show separate existence of the letter *khyā*. The tradition can be traced from an earlier period. Both *anusvāra* and *visarga* have been treated as vowel in the manuscript of the reign of Harivarman mentioned above. The last letter of the consonants in this document can be compared to the form of the conjunct *kṣa* recorded in the famous Deopada Prasasti of the reign of Vijayasena. The lexicon *Ekākṣarakoṣa*, ascribed to Puruṣottama, allude to sixteen vowels (including *anusvāra* and *visarga*) and thirtyfour consonants, the last one being *kṣa*.⁶¹ In the *Vaṃśa-desanā*, Puruṣottama accounts for the confusion between *kṣa* and *kha* and explains the phenomenon as being due to the similarity of the characters employed by the Gaudas and others.⁶² This observation seems to be confirmed by the character for *kṣa* used in l. 6 of the Mehar copper plate inscription of the reign of Damodaradeva, dated in the year 1156 of the Saka era (= A.D. 1234). An older form of the conjunct, found in this record, can be traced from the Jagajjibanpur (Malda District, West Bengal) copper plate inscription dated in the year 7 of the reign of the Pala ruler Mahendrapala. The *Vaṃśa-desanā*, however, clearly hints at the system of pronouncing *kṣa* as *khyā*. The other method of pronouncing *kṣa* (*k + ṣ*), popular with the Bengalees, is noticed in the attempt at articulating the sibilant before the guttural or rather the velar *k* (cf. *basko* instead of *bakso*). The same thing seems to have been followed in the Deopada prasasti in which the conjunct *kṣa* always looks like *skā* (*s + k*). Identical characters for both *ba* and *va* have been employed in the records dating back from the seventh century with few exceptions. The fact that no distinction was made between the two in the mode of pronunciation had led to the omission of the square *ba* although the blow should have descended on *va*.

The script, used in the written documents found in Bengal and belonging to different periods, is characterised by certain peculiarities.⁶³ The character for *śa* in the Mahasthangarh tablet looks more like *ṣa*. No distinction has been made between *śa* and *ṣa* in the inscriptions of the fifth century A.D. discovered from 'North Bengal'. The best illustration is the inscription engraved on a copper plate which had come to light from Kalaikuri. It is dated in the year 120 (of the Gupta era).⁶⁴ The *prsthā-mātrā* for medial *e* evidently developed out of the tendency to slant down the top from the left which led to the gradual lengthening of the sign until it reached the bottom of the parent letter. The earliest use of the *prsthā-mātrā* is found in the copper plate of the reign of Bhavadēva from Mainamati (Comilla District, Bangladesh).⁶⁵ Both the *prsthā* and *śircā-mātrās* were deployed in the inscriptions of the second half of the ninth and beginning of the tenth century A.D. (cf. the Badal prasasti of the reign

f Narayanapala). The copper plates of Śricandra and Laḍahacandra from Kānpal, Paschimbhag and Mainamati invariably bear the *pr̥ṣṭha-mātrā* for medial *e* and *o*.

Ishwar Chandra Vidyasagar reformed the Bengali alphabetical system in the second half of the nineteenth century. The first edition of the *Varna-
"aricay* (a), First Part, appeared in (Vikrama) Samvat 1912. Vidyasagar writes in the Preface that the letters *ḍa*, *ḍha* and (i) *ya* should be treated as independent consonants; for, both in form and pronunciation they are distinct from *da*, *dha* and *ya*. The statement implies that the forms of the letters concerned had been current from an earlier period. In fact, Ram Mohan Ray recognised the distinct pronunciation of *ḍa* and *ḍha* but did not treat them as separate letters.⁶⁶ Independent existence of the letter *i/ya* in the fifteenth century seems to be proved by two manuscripts. They indicate the pronunciation of *i/ya* distinguished from that of *ya*. The manuscript of *Kusumāñjaliprakāśa* (Asiatic Society, no. G 794) bears the representation of *i/ya* which has been formed by adding a 'sword mark' below the lower rib of *ya*. It is dated in the year 1342 of the Saka era (= A.D. 1420). A manuscript of the *Vaiṣṇava-māhātmya* (Bangiya Sahitya Parishat, no. 473), dated in the year 1366 of the Saka era (= A.D. 1444) bears the letter under consideration both with a 'sword mark' and a blob, the former evidently being shortened into the latter. An inscription from Chhatna (Bankura District, West Bengal) dated in the year 1655 of the Saka era (= A.D. 1733) is the earliest epigraph so far known to us from West Bengal which bears the form of the letter (*ḷ*) *ya* with a circle below *ya*.⁶⁷

There is no representation of either *ḍa* or *ḍha* in the inscriptions which can be dated in the period between the beginning of the fifteenth and end of the nineteenth century.⁶⁸ Reference may be made here to a manuscript of the *Dharma-ratna* noticed by Mm. H. P. Shastri.⁶⁹ It is appended by a horoscope to the left of which the date can be clearly read as Saka 1475 (= A.D. 1553).⁷⁰ The most important thing to note is the word *āṣāḍha* recorded in connexion with the date. The last letter of the word has been written as *dha* with a dot below. In no other document of the sixteenth century the modern Bengali character for *ḍha* could be traced out. Moreover, the characters used for writing the date cannot be ascribed to the sixteenth century. The manuscript of the *Khaṇḍanoddhara* mentioned above contains the forms of *ḍa* and *ḍha* each possessing a pellet; but, as we have already noted earlier, its date does not appear to be as early as A.D. 1488. That the letter *ḍa* was used in the beginning of the seventeenth century seems to be evident from a manuscript of the *Kīrātāparvan* (now preserved in the North Bengal State Library, Cooch

Behar), dated Saka 1527 (= A.D. 1605). The letter occurs in several manuscripts of the eighteenth century. Mention may be made of the *Padma-purāṇa*, dated in Saka 1675 (= A.D. 1753), preserved in the North Bengal State Library, Cooch Behar, and the *Napumsakāṇḍa*, dated in the year 1705 of the Saka era (= A.D. 1783) and preserved in the Malda District Museum, Malda.

The examples cited above sufficiently prove that *da* was undoubtedly used as a separate letter in the medieval period. On the ground of its occurrence we can postulate the existence of *dha* in the same period though it is not always represented in the written documents datable to the seventeenth and eighteenth centuries. Although the letters *da*, *dha* and *(h)ya* do not figure in the lists given in the *Ekāksarakosa* and the *Code of Gentoo Law*, it is clear that innovations were made in the medieval period to indicate their sounds distinct from those of *da*, *dha* and *ya*.

The practice of writing conjuncts with the component members shortened or placed horizontally, retaining older forms in some cases, led to the development of some typically Bengali characters like those of *kta*, *kṛa*, *sna*, *stha* and others.

Inscriptions of ancient and medieval Bengal are of immense help to us in tracing the development of numerical notations. The earliest inscription from Bengal bearing numerical sign is a terracotta seal from the Chandraketurgarh region (North 24 Parganas, West Bengal). It bears on the obverse the notation for 90.⁷¹ In the Dhanaidaha copper plate inscription of the year 113 (of the Gupta era), three different symbols denoting 100, 10 and 3 have been used.⁷² The earliest attempt at using the decimal system is traceable in the Egra copper plate inscription of the reign of Sasanka which in line 27 bears the sign for hundred (100) followed by a pair of blobs.⁷³ Unambiguous use of this system in Bengal is noticed for the first time in the Asrafpur copper plate of the reign of Devakhadga.⁷⁴ The numerical notations used for recording the date are 1 and 3 respectively (instead of those for 10 and 3).

The Sahitya Parishat copper plate inscription of the reign of Visvarupasena bears signs indicating fractions. They may be compared to the symbols once used to denote annas when sixteen of them made a rupee. The Mehar copper plate, dated Saka 1156 (A.D. 1234), contains a number of signs which seem to indicate 4 and its multiples. The same symbols appear to have been used for denoting fractions of measurements relating to flat areas of land.

The punctuation marks have been given by either a single vertical line (*danda*) or double verticals joined by a short horizontal line. The earliest

use of punctuations is noticed in the Mahasthangarh tablet (c. 3rd century B.C.). In medieval inscriptions, however, floral designs, occasionally within a square, have been employed to indicate either half or full stop. They have sometimes been used with the purpose of filling in the blanks left by the scribe out of mistake. Attempts were made at inserting letters dropped by the artisans. Viṣṇubhadra, the Sūtradhara, who engraved the Badal pillar inscription, had accidentally missed the letter *bha* in inscribing his own name and then put it below between *ṣṇu* and *dra*.⁷⁵ This practice has often been followed in manuscripts in which the dropped letters are normally written on the space on the left.

The *avagraha* sign has often been used and it always stands for the elided (*lupta*) *a*. The inscriptions normally begin with *siddham* expressed by a symbol which looks like either a *khaṇḍa* ta or an elephant's trunk hanging down.⁷⁶

NOTES & REFERENCES

1. The earliest reference to the script of Vanga is found in the Mahavastu Avadana (ed. R.G. Basak, Calcutta, 1965, p. 160). The Lalitavistara (ed P.L. Vaidya, Darbhanga, 1958, p. 88) also refers to vanga-lipi. Development of the Bengali script from the ancient to the early medieval period has been outlined in Buhler's Indische Palaeographie (Grundriss, Strassbourg, 1890), G.H. Ojha's Bharatiya Pracinā Lipimālā (Ajmer, 2nd ed. 1918), A.H. Dani's Indian Palaeography (Oxford, 1963) and in D.C. Sircar's Introduction to Indian Epigraphy and Palaeography (Journal of Ancient Indian History, Vol. IV, pp. 72-136). Evolution of the Bengali script in particular has been traced by R.D. Banerjee (The Origin of the Bengali Script, Calcutta, 1919), Mm. H.P. Shastri (Bangalar Purana Aksar in Suniti Kumar Chattopadhyay and Anil Kumar Kanjilal, ed., Hara Prasad Racanabali, Calcutta, B.S.1363, pp. 294-307) and S.N. Chakravarti (Development of the Bengali Alphabet from the Fifth Century A.D. to the End of the Muhammadan Rule in the Journal of the Asiatic Society of Bengal, Letters, Vol. IV). A.K. Bhattacharyya has traced the development of the letters found in the temple inscriptions of medieval Bengal (A Corpus of Dedicatory Inscriptions from Temples of West Bengal, Calcutta, 1982). Dipak Chattopadhyay's article on the Development of Bengali Script has been published in B Chattopadhyay, ed., Culture of Bengal Through The Ages: Some Aspects, Burdwan, 1988, pp. 113-37. See also A. Bhattacharyya, A Guide To Early Brahmi and its Derivatives in Bengal, Calcutta, 1987, Pracin Banga: Lekha O Lipi in K.K. Kundu, ed., Prabandha Sankalan : Prasanga Tamralipta, Tamralipta, 1993, pp. 39-52 and charts I-V.
2. Epigraphia Indica, Vol. XXI, p 85.
3. B.N. Mukherjee, Kharoshti and Kharoshti-Brahmi Inscriptions from West Bengal (India), Calcutta, 1990 (Indian Museum Bulletin, Vol.XXV).
4. R.K. Sharma (ed.), Studies in the Shell Script, Delhi, 1990, pp. 113-21.
5. Epigraphia Indica, Vol. XII, pp. 317ff.

6. B.N. Mukherjee, op. cit., Pl. XX, fig. 9C. The arrangement of the letters seems to be like that of the characters in a Shell inscription (Ibid., p. 46-7).

7. *Epigraphia Indica*, Vol. XV, pp. 130 ff.; XVII, pp. 347-48; XX, pp. 61 ff; XXI, pp. 81 ff.; *Indian Historical Quarterly*, Vol. XIX, pp.21-24; D.C. Sircar, *Epigraphical Discoveries in East Pakistan*, Calcutta, 1973, pp. 8-14 and P1.

7a. J. F. Fleet, *Corpus Inscriptionum Indicarum*, Vol. III, 2nd edn., Varanasi, 1963, pp. 1-17 and P1. i.

8. Ibid., pp. 21-25 and P1. ii B, pp. 34-35 and Pl. iv A.

9. *Indian Historical Quarterly*, Vol. VI, pp. 53 ff.

10. *Orissa Historical Research Journal*, Vol. IX, pp. 206 ff.

11. *Epigraphia Indica*, Vol. XXIII, pp. 159 ff.

12. *Indian Antiquary*, Vol. XXXIX, pp. 195 ff.

13. *Epigraphia Indica*, Vol. XV, pp. 142 ff.

14. Fleet, op. cit., pp. 221-28 and Pls. xxx B and xxxi A-B.

15. *Epigraphia Indica*, Vol. X, pp. 50-51.

16. Fleet, op. cit., pp. 274-78 and Pl.xli A.

17. *Epigraphia Indica*, Vol. XV, pp. 306 ff.

18. D. C. Sircar, *Select Inscriptions Bearing on Indian History and Civilization*, Vol. II, Delhi, 1983, pp. 36-40 and Pls. I-II.

19. *Memoirs of the Asiatic Society of Bengal*, No 6, pp. 89-90.

20. Fleet, op. cit., pp. 200-08 and P1. xxviii.

20a. Ibid., p. 201.

21. *Epigraphia Indica*, Vol. I, pp. 75-85 and Pl. Buhler was not in favour of using the term Kutila and described the letters of the Dewal inscription as Nagari of the North Indian type (ibid., p. 76).

22. D.C. Sircar, *Introduction to Indian Epigraphy and Palaeography* (*Journal of Ancient Indian History*, Vol. IV), pp. 115-16.

23. Dani, op.cit., pp. 132-33.

24. D.C. Sircar, *Select Inscriptions*, Vol. II, pp. 63-70 and Pls IV-V.

25. *Epigraphia Indica*, Vol. XVIII, p. 304 ff.

26. Ibid., Vol. XVII, p 318 ff.

27. G. Sengupta, ed., *Pratna Samiksha*, Vol. 1, 1992, Pl. facing p. 170.

28. E. C. Sachau, *Alberuni's India*, Delhi, 1964 (Reprint), Vol. I, p. 173.

29. D C. Sircar observes that Gaudī'' is undoubtedly a more suitable name since the use of the alphabet in question was not confined to Bengal'' (*Journal of Ancient Indian History*, Vol. IV, p. 120).

30. C.D. Dalal and R.A. Sastri, ed., *Kavyamimamsa*, Baroda, 3rd. edn., 1934, pp. 93-94.

31. D.C. Sircar, *Silalekha Tamrasasanadir(a) Prasanga*, Calcutta, 1982, Pl.

XII.

32. *Journal of the Asiatic Society of Bengal*, Vol. LXI, pp. 77-87; *Epigraphia Indica*, Vol. XVI, pp. 384 ff. For the inscriptions of the Candras see D.C. Sircar, *Epigraphical Discoveries in East Pakistan*, Calcutta, 1973, Pls. III-IX.

33. A. K. Martreya, *Gaudalekhamala*, Rajshahi, B. S. 1319, Pl. facing p. 70.

33a. N. G. Majumdar, *Inscriptions of Bengal*, Vol. III, Rajshahi, 1929, Pl. facing p.4.

34. *Indian Antiquary*, Vol. XIV, p. 165.

35. D.C. Sircar, *Silalekha Tamrasasanadir(a) Prasanga*, Pl. XIII.

36. *Ibid.*, Pls. XIV-XV.

37. N.G. Majumdar, *op. cit.*, Pls. facing pp. 152 and 156.

38. D.C. Sircar, *Pal(a)-Sen(a) Yuger(a) Vamsanucarit(a)*, Calcutta, 1982, p. 31.

39. H.P. Shastri, *op. cit.*, Pls. IV-V.

40. D.C. Sircar, *Epigraphical Discoveries in East Pakistan*, Pls. III-IV.

41. S.K.Saraswati, *Pal(a) Yuger(a) Citrakala*, Calcutta, 1978, Pls. facing pp. 74 and 77.

42. N.G. Majumdar, *op. cit.*, Pl. facing p. 16. 43. *Ibid.*, Pl. facing p. 44.

44. *Ibid.*, Pl. facing p. 68.

45. See no. 42.

46. N.G. Majumdar, *op. cit.*, Pl. facing p. 88.

47. See. No.24.

48. *Ibid.*

49. D.C. Sircar, *Silalekha Tamrasasanadir(a) Prasanga*, Pls. XXI-XXII.

50. N.G. Majumdar, *op. cit.*, Pl. facing p. 140.

51. D.C. Sircar, *Select Inscriptions*, Vol. II, Pl. IX.

52. D.C. Sircar, *Some Epigraphical Records of the Medieval Period from Eastern India*, Delhi, 1979, Pl. XIV.

53. *Ibid.*, Pl. IX.

54. *Ibid.* Pl. XVIII, No. 1.

55. A.K. Bhattacharyya, *op. cit.*, pp. 49-50 and Pl. I.

56. For the development of ra see also Srabani Datta, *Bangla ra-er(a) Kramabibartan(a) in Itihas(a) Anusandhana*, Vol.VII pp. 192-98 (Published by the Paschimanga Itihas Samsad, Calcutta.)

57. A.K. Bhattacharyya, *op. cit.*, pp. 49-50 and Pl. I.

58. *Ibid.*, Pl. XVIII.

59. *Ibid.*, Pl. XLVI.

60. *Ibid.*, Pl. XLII. It is possible that the method of writing Sri and Pri is in consonance with the system of pronunciation approaching siri and piri respectively.

61. Gurunath Vidyanidhi (ed.), *Amarartha Kalpadruma or Amarartha Candrika*, Calcutta, B.S. 1334, pp. 423-27. Purusottama, the lexicographer, has been identified with the grammarian of the same name (S.C. Bandyopadhyay, *Sanskrita Sahitye Bengalir Abadana*, Calcutta, B.S. 1389. p. 260). He lived in the twelfth century A.D. (Ibid., p. 244).

62. J. Eggeling, *Catalogue of Sanskrit Manuscripts in the Library of the India Office*, London, II, 295, No. 1039/1475 a, London, 1887.

63. The sign for anusvara, used in Devanagari, was, however, more popular in Bengal even in the seventeenth century. This is evidenced by the epigraphs which have come down to us.

64. D.C. Sircar, *Silalekha Tamrasasanadir Prasanga*, Pls. II-III.

65. *Journal of the Asiatic Society*, Letters, Vol. XVIII, p. 83 ff.

66. B.N. Bandyopadhyay and Sajani Kanta Das (ed.), *Ram(a)mohan(a) Granthavali*, No.7, Calcutta, pp. 7-8.

67. A.K. Bhattacharyya, op. cit., Pl. LXXII. The oval-shaped sign below ya appears to be an integral part of the inscription.

68. An inscription, dated in the year 1731 of the Saka era (=A.D.1809), appears to bear the letter da though the intended blob below da is not clear. The dot below ya in this record is, however, distinct (A.K. Bhattacharyya, op. cit., Pl. CXXXIX).

69. Dharmaratna appears to have been the title of the ambitious project undertaken by Jimutavahana. Three parts of the work are known to us, viz., the Vyavahara-matrika, Dayabhaga and Kalaviveka. Jimutavahana probably belonged to the twelfth century A.D. (*Journal of the Asiatic Society of Bengal*, 1915, pp. 321-27).

70. H.P. Shastri, op. cit., Pl. XIX. Mm. Shastri conjectured that this manuscript of the Dharmaratna was written before Saka 1475. The date, according to him, is that of birth of the person or child which had been recorded along with the horoscope by the owner of the manuscript. Such practices were quite common. The date and the horoscope appear to have been written by the same hand. The forms of the letters, however, do not tally with the date recorded.

71. B.N. Mukherjee, *Kharoshti and Kharoshti-Brahmi Inscriptions in West Bengal*, Pl. XXII, fig. 14 A-B.

72. *Epigraphia Indica*, Vol. XVII, No.7, pp. 113 ff.

73. D.C. Sircar, *Silalekha Tamrasasanadir Prasanga*, Pl. VII.

74. *Memoirs of the Asiatic Society of Bengal*, No. 6, pp 89-90. Devakhadga may be placed in the seventh century A.D.

75. A.K. Maitreya, *Gaudalekhamala*, Pl. facing p. 70.

76. I am grateful to Smt. Ranjuri Ghosh, Minarani Ghosh and Sraban Datta for the help and cooperation they extended to me ungrudgingly.

TWO PALI WORDS : KANKHATI AND AMISA

SADHAN CHANDRA SARKAR

The Pali grammar of Kaccayana has generally followed the older grammars like *Aindra-vyakarana*, *Katantra-vyakarana* and *Astadhyayi* of Panini. Besides Kaccayana other Pali grammarians like Moggallana, Aggavamsa of Saddaniti are indebted to the earlier traditions of Sanskrit and other grammatical treatises. This has been evinced through the acceptance as well as retention of some of the technical terms of Sanskrit grammar like *attanopada*, *abbhasa*, *agama*, *adesa*, *guna* in Pali grammar. These terms are used in Pali grammar in identical technical meaning of their counterparts. The influence of Sanskrit and other earlier grammars was so evident that Kaccayana even had to acknowledge it by his *sutra* '*parasamannapayoge*'. The rule implies that for technical terms and definitions one is to depend on earlier Sanskrit grammars specially when if they have not been discussed by his own work. In spite of such inheritance, Pali grammatical works have preserved their distinctiveness.

In respect of the use of radices also Pali grammarians and lexicographers have generally followed as well as adopted the meaning conveyed by the roots of Sanskrit counterparts as given and enlisted in the Sanskrit *Dhatupathas*. A peep into the Pali grammatical texts like *Dhatupatha*,² *Dhatumanjusa*³ and *Dhatumala* sections of the *Saddaniti*⁴ reveals that the root-meanings, in most cases in Pali, are similar to those of the traditional meaning of Sanskrit grammars.

This paper proposes to discuss first a peculiar use of the radix Kankha with some of its verbal and nominal forms like kankhati, kankha, kankhana, kankhayana, kankhayitatta. The radix kankha, besides its original and principal meaning preserved, in Sanskrit kanks⁵ - 'to desire', 'to long for'; has developed a quite different meaning - 'to doubt' which is not attested by Sanskrit *Dhatupatha*. The secondary meaning (i.e. 'to doubt' of Pali radix kankha) is always used in context with some *abhidhammika* expressions. It is very difficult to ascertain the source of such deviation from the original meaning and thus has received distinction in Pali literature.

Now let us find out here the root-meaning of the verbal form kankhati. The root belongs to the bhuvadi (sanskrit Bhvadi) group. The Pali *Dhatumanjusa* interprets this radix as Kankha kankhane⁶. The Pali *Dhatupatha*⁷ also retains the primary meaning of the root - 'to desire', 'to long for' which is identical with Sanskrit lexicon where the primary meaning 'to wish' 'to desire', 'to long for', are found always with the accusative case. In some cases we notice also a secondary meaning, mostly in the seventh case ending (for example, Sathari kankheyya, A IV, 460), there, in the sense 'to expect', 'to wait for' etc. But a critical

assessment of this secondary meaning helps us to realise that these meanings are but extension of the principal meaning of the root. Further we are to note here that the meaning 'to desire'⁸, whether in medial or active forms of the verb⁹, is always prefixed by 'a' as in akanksati¹⁰ in Sanskrit. The Buddhist Sanskrit texts in a very few cases also retain this meaning of 'desiring' as in dharmakanksa (*Saddharmapundarika*, 258, 6). But more frequent use in the meaning of 'doubting' is found in the following extracts: *Kanksam tatha samsayam ca: Saddharmapundarika*, 49, 18; (free from doubt) 63, 8.

Alike Sanskrit, in Pali the use of the verbal forms of radix kankha, both in the *Tipitka* literature and in the commentaries, is noticed in its primary sense 'to desire', 'long for', e.g. kalam kankhati (*Samyuttanikaya* I 6, 25; *Suttanipata*, verse 516). The commentaries explain this verbal form as pattheti or icchati.¹¹ The *Saddaniti*, a later grammatical work, in its *Dhatumala* section, while commenting this radix, specifically states - kakhi icchayam, 330, 11; the illustration given is dhanam kankhati (longs for money or wealth). The meaning 'wait for' mentioned earlier, might have been drawn from primary meaning of the root and thus may be grouped under the primary meaning - 'to desire'. The secondary meaning, i.e. 'doubting', 'hesitating', etc. is rather uncommon and away from the original meaning of the root. A lot of nominal or verbal forms like kankha, kankhayitatta, kankhana, having developed mystically has outnumbered the original meaning in the sense of 'desiring' and in later Pali texts, excepting a few, the primary meaning seems to be lost and that is why nominal form kankha is very often used in cliché followed by vimati.

The *Saddaniti*,¹² however, besides the primary meaning retains the secondary meaning with its synonyms (kankha, vimati, samsayo). The *Dhammasangani*, an *Abhidhamma* text, also describes the synonyms of kankha as vicikiccha, vimati, dvelhakam, samsayo, dvedhapatho.¹³ The most of the non-canonical texts, like the *Milindapanha*, frequently use the secondary meaning only (cf. *maya saddhim sallapitum sakkoti, kankham pativinetum*, 5,24; 19, 12). The other texts like *Buddhavamsa Udana*, *Upasakjanalankara*, *Kathavatthu*, *Samantapasadika* are diffused with the use of secondary meaning of the radix. Thus use of the secondary meaning of the radix exceeds the primary meaning which gradually become rare in use in the texts—both canonical and non-canonical. How and why the secondary meaning pushed away the original sense of the radix is now an interesting subject of research. Such use is neither attested by grammatical rules nor by philological phenomena.

Further the list of synonym of kankha¹⁴ in Moggallana's *Abhidhanappadipika*¹⁵ written after the style of Sanskrit *Amarakosa*, leads us to a hypothetical conclusion that the synonyms here are

incorporated from the *Dhammasangani*, an earlier *Abhidhamma* text. Besides this text, the use of the secondary meaning may be attested by a quotation from the *Samyuttanikaya* (*mayham bhante ahudeva kankha ahu vicikiccha*) IV, 350, 12.

From the foregoing discussion we have noticed that the secondary meaning of radix kankha has little connection with original Sanskrit root and therefore meaning 'to doubt', 'to hesitate' etc. had no relation either with the classical Sanskrit or Vedic language.

Let us now turn to the synonyms of kankha, viz., vicikiccha etc. as we find in the exposition of the *Atthasalini*, a commentary of the *Dhammasangani*. Here in the section of vicikiccha, kankha has been annotated as (i) kankhanavasena kankha (ii) kankhaya ayana ti kankhayana (in the exposition of perplexity or doubt, doubt is the act of doubting). An earlier doubt is said to induce a subsequent doubt (*purmima-kankha ti uttarakankham aneti*). Again vicikiccha (perplexity) has been explained in the sense of wavering. The commentary of dvelhakam is: dvidha calayati ti dvelhakam. Samsayo again is explained thus : niccam nu kho ti ekasmim akare santhatum asamattataya samanto toseti ti samsayo (Is this state permanent, or is it impermanent ? Because of the inability to comprehend there is uncertainty of grasp). From the above explanatory quotations as to the various synonyms of vicikiccha, under vicikiccha-section, it appears that kankha is the almost nearest synonym to vicikiccha in which a tinge of doubt in no way be denied. But on the other hand C.A.F. Rhys Davids in her translation¹⁶ of the text *Dhammasangani* observes that in the word 'doubting' there is the dual state of a mind, but in vicikiccha there is no such dual state of mind. Cikiti is the desiderative or frequentative of cit 'to think'. The prefix 'vi' indicates here either intensive or distracted thinking. She, therefore, likes to render it as 'perplexity' than 'to doubt'. According to Mrs. Rhys Davids,¹⁷ the rendering doubt is not a match for kankha which has also a primary meaning 'to desire'. Therefore, in the expressions like kankhati dvisu lakkhanesu (*Dighanikaya*, I 106, 11), satthari kankhati vicikicchati (*Anguttaranikaya*, IV 12), Mrs. Rhys Davids is not happy to accept the meaning 'doubting'. She, however, finds a better meaning of 'doubting' in the synonym, i.e. dvelhakam, and hence all other synonyms, according to her, cannot be rendered as 'doubting'.

Leaving aside this subtle difference, we assume that the synonyms more or less have common character and kankha, in which 'dubiousness' or the 'distracted state of mind' has been implied by the word 'doubting', covers roughly all the meanings. It has been stated that the meaning 'to doubt' has no root-meaning. In this connexion it may also be pointed out that the Sanskrit and Pali root Sank or sankha respectively carries the sense of 'doubting', 'hesitating' etc. and thus kankhati in its secondary

meaning has relationship with the root Sank (Sanskrit) or Sank (Pali). Perhaps no philological rule be applied in support of such change of Pali sankati to kankhati. Whether the meaning 'to doubt' of kankha is drawn on the analogy of sankati is yet to be scientifically established. The only way to get rid of this riddle is to seek help of the *Saddaniti* where it has been stated that kankha, kankhayana..... vimati vicikiccha dvelhakam.....samsayo.....icce etc. kankha-pariyaya etesu pana vattanti lokavohare. According to this *tika*, if we are permitted we may presume that the meaning 'to doubt' of the radix kankha derives from some prevalent local usages, besides regular meaning 'to desire' which is found in some of the early texts. The secondary meaning, perhaps, got its approval through the use of explaining the philosophical passages in the *Abhidhamma* texts. Later on, the grammarians, lexicographers and commentators had to incorporate the secondary meaning besides the original meaning 'to desire'.

Further in the *Katantra-vyakarana* the acceptance of the local usages in grammar has been sanctioned by the rule 'lokopacarad grahanasiddhih'.¹⁸ The *Panjika* of Trilocanadasa in its expositions clearly states - lokanupacarah vyavaharah, tasmadanuktasyapi siddhir veditabyeti....loka tu sastrakarah itare pi tesam upacarah grhyate anenarthah.

Thus the use of the secondary meaning of radix kankha may receive authority also from the *Katantra-vyakarana*, the influence of which in no way be ignored in the composition of the Pali grammar and other grammatical treatises.

The other word of this paper is the nominal *amisa*. In Sanskrit the derivation is *is* a – *mis* + *kvip*. The word is commented as *amisati sincati sneham iti mamse*, or the equivalent of *amisa* is *mamsa*.¹⁹ *Mamsa snehatirekattasya tathatvam*.

The word is also derived from the root √ *am* (*cura*) with the addition suffix, *tisac*^{19a)} and the lengthening of the vowel in the root has been supported by the rule *Am roge* : Panini; *unadi prakarana* (46), *dhato ame dirghasca tisac pratyayo*, *dhatorakarasya dirghah*. The meaning of *amisa* as raw meat or flesh is also traced in the *Rg Veda*²⁰. In some places of the *Smṛti* text of Manu, *amisa* stands for flesh or raw meat. Flesh of various creatures were used to be offered as oblation to the forefathers.²¹ (*Pitrsraddham pitrnam masikam sraddhamnvaharyam vidurbudhah taccamisena karttavayam prasastena prayatnatah*). Kulluka's commentary clearly states that *amisa* here is *vaksyamanamamsena*, and the permitted flesh as offerings or oblation are of deer, ram, birds acceptable to the Brahmins, goat, boar, spotted deer, ena-deer, buffalo, white old-goat, hare,

red-goat and rhinoceros.²² The two great epics²³ the *Ramayana* and the *Mahabharata* use the term amisa to mean flesh or raw-meat. Kalidasa's *Raghuvamsa* records amisa as flesh (Sa nyastasastro Haraye svadehampanayat pindamivamisasya, Raghu, II. 59). Similarly the Sanskrit text like the *Hitopadesa*, *Pancatantra*, *Dasakumaracarita*, *Avadanakalpalata*, have used extensively the term amisa to mean flesh or raw-meat. The *Amarakosa* besides recording the synonyms of amisa as pisitam tarasam mamsam palalam kravyamamisam (*Nanarthavarga*, Am. K III. 6.83) explains amisa also as utkoca (bribe). The other synonyms are sundararupa, (beautiful forms), lobha (greed, lust, longing and desire), lobhanihya-visaya (objects of greed), bhogyavastumatre (enjoyable things in general)²⁴ (cf. Am. K 191 *Manusyavarga*); strife, gift or reward, Prey bait.²⁵

Besides the meaning of amisa as flesh or raw-meat, the synonyms or meaning which are above, are very rarely used in the Sanskrit literature and most of them are retained in lexical works.

Now let us turn to Pali, the language supposed to be used by Gotama Buddha. The nominal amisa in pali is a very interesting and peculiar word which even preserving all the meanings of Sanskrit lexicon develops a new meaning in the *Vinaya*-literature. The inherited meanings of Sanskrit lexicon are also found in the pali lexicon, grammar, and other Anglo Pali Dictionaries edited by Rhys Davids, Trenckner, Childers. These are 1. Flesh, 2. Prey or bait, 3. eatable things in general, 4. reward or gift, 5. goods or material things, 6. desire, specially for earning profit, 7. death, (metaphorically), 8. the primary things of use of the monks or nuns technically known as parikkharas.

The *Abhidhanappadipika*, worked after the Sanskrit *Amarakosa*, provides us with the synonyms of amisa in the *sutta* No. 280 and these are almost parallel with those of the *Amarakosa* (atho mamso amisam pisitam bhavet). The vutti of the *Moggallana Vyakarana*, however, explains amisa as 'amisamitibhakkhe,' any eatable thing is to be taken as amisa. While the *Saddaniti* interprets the word as material things, worldly goods etc., with apt quotation from the *Papancasudani*,²⁶ a commentary of the *Majjhimanikaya*. The *Abhidhanappadipika* in article no. 1104 states the other meaning of amisa.

It is very amazing to note here that in the Pali literature the use of *amisa* in the sense of flesh or meat is quite less excepting in the different lexicons. Even when this word is used, its use has a twisted meaning conveying prey or bait or lure. Thus when flesh in a hook of an angle is set in catching fish the meaning of amisa is changed to bait, lure,

prey etc. and thus the original meaning is replaced. To clarify it we may quote a few sentences from the *Maha-ummagga Jataka*²⁷: amisa giddho hutva balisam gilati. It is more glaring to point out that whenever the meaning of flesh is intended the writers or the compilers in Pali directly use the word *mamsa* for reason unknown. The *Jatakattakatha*, *Dhammapadatthakatha*, *Vinayapitaka*, *Majjhimanikaya*, *Dhammapada*, *Visuddhimagga* and other canonical and non-canonical Pali texts are replete with the uses of the word. We illustrate here some words: Mamsa-upasecana (sauce for meat) Jataka III 144; Mamsa-kalyana (beauty of flesh) Dhammapadatthakatha, I 387; Mamsa-khadaka (flesh-eater) Ja VI; mamsapesi, Vin II 25; Mamsa-lohita, (flesh and blood) Dh 150.

The examples of figurative and metaphorical meaning are found connected with maccu (death), tanha (desire), lobha (greed) etc. In the sentence te va khananti aghamulam maccuno amisam durativattam, *Ud* 15,4; the word amisa is commented here as ariyapuggala aghassa vattadukkhassa mulabhutam maccuna maranena amasitabbato amisam, *Ud-a* 121,24. The following sentence shows how the word is used in the meaning of prey, lure or bait: makkatikam amisena upalapetva, *Vin* III 21,29; ayasma Nando Satthara devacchara amisam katva (by employing celestial nymphs as lure), *Dhp-a* I 122,24. The use of amisa in the sense of food, palatable food, dainties, or in the sense of material things, gifts, or gains, is larger in number and mostly found in the compounds like amisa-katha (mention of food), *Vin-vn* 1156-59; amisaidhi (prosperity of material things), *A* I 93-32; amisa-kincikkhanimittam (in order to obtain little food or material gain) *Pv* 240, *S* II 234, 8; *M* I 286,30; amisa-sannidhi (stores of various ingredients), *DI* 6,5; amisa-dayada, (one who shares material things) *M* I 12,15.

It has been stated earlier that amisa means food or palatable food, but in special sense it stands for alms or food offered to the monks, or nuns. Such amisa then denotes the parikkhara i.e. the primary requisites of the members of the Buddhist sangha. The parikkhara in the *Vinaya* literature is a group of four or eight primary needs of the Buddhist recluse.

These indispensable things or accessories described in Pali literature are: civara (robe), pindapata (alms-food), senasana (the place of sleeping and sitting) gilapaccayabhesajja (medicine as help in illness), *Vin* III 132, *DI* 268. These indispensable things were four in primary stage and later another four added are: vasi, suci, kayabandhana and parissavana (knife, needle, girdle and water-strainer). Therefore in special sense amisa would also mean the parikkhara which was acceptable as nippariyaya amisa or things (accepted) without distinction or attachment. If these are accepted with lust desire they no longer remain parikkhara and be regarded as object of tanha.

From the foregoing discussion it appears from statistics that in Pali literature the Buddhist used the word amisa largely in the meaning of eatable things i.e. food, goods, gifts, material things, worldly gains etc. and in respect of the *Vinaya* and *Abhidhamma* literature it is used to signify the parikkharas i.e. the primary needs of a Bhikkhu-life, and both the acceptance and offering of the Nippariyaya amisa become wholesome to the spiritual benefit.

It is amazing that amisa as flesh has been incorporated in the lexicons only, excepting a single or very few use in the *Jatakathakatha* and when the meaning of flesh is intended the Buddhist writers or compilers deliberately use the word mamsa in all places of the canonical literature and early non-canonical literature. So as against the regular use of the word amisa, in the meaning flesh, the use of amisa in Pali becomes almost faint or rare, and in course of time the meaning turns obsolete, though they are preserved in the lexical work of later age. Such treatment to the word amisa in Pali may not be justified properly why this changes in semantics grew up.

NOTES & REFERENCES

1. Kaccayana, 9.*

* used for indicating rule, here and hereafter.

2. Belonging to Moggallana school, author and time of composition is unknown.

3. From the colophon it appears that the text belongs to the school of Kaccayana, and the Thera Silavamsa happened to be its author.

4. Aggavamsa is the author, and composed at the time of the Burmese king Narapati-sithu (1154 A.D.); edited by Helmer Smith, Lund, 1928-30.

5. Sanskrit Dhatupatha, 17/16.

6. *Dhatumanjusa*, 20.

7. Kankha icchayam, 20.

8. Kaksi vanchı icchayam, 3.3.101; cf. kaksi vaksı maksı kanksayam, *Siddhantakaumudi*, *Bhavadiprakarana*, *vartika*.

9. Shown in Sanskrit Worterbuch, I, ed. by Roth, Petersburg.

10. cf. the *Akankheyya suttas*, *Majjhimanikaya* I, 33-36; *Anguttaranikaya* V, 131-33. Here root kankha prefixed by 'a', is used in the primary sense, and bears no reflection of the secondary meaning 'doubting' and 'preplexity'.

11. *Sarattheppakasini*, II, 374, *ibid*, I 126, 5.

12. *Saddaniti*, 330, 9.
13. *Dhammasangani*, 182, 15.
14. Manovilekho, samdeho, samsayo ca kathamkatha dvelhakam vicikiccha.
15. *Abhidhanppadipika*, 170.
16. *A Manual of Psychological Ethics*, 115.
17. *Ibid*, 115.
18. Vide rule 23, *Sandhivrttih*.
19. *amisi mamse*.
- 19(a). cf. *Siddhanta Kaumudi*, *Balamanorama tika*, amdhato istac bhavati, prakrerakarasya dirghasca.
20. a ye vayo na varvrtatyamisi grbhita bahvorgavi, VI.46.14;
21. *Manusmṛti* III 123.
22. *ibid*. III, slokas 268-272.
23. *Ramayana* III 57.7; *Mahabharata*, III. 86. (Yatha hyamisamakase pakalbhiih svapadair bhuvi bhaksyate)
24. vide *Medini tika*, *Am-K* III.3.222 (amisam punnapumsakam bhogyvastuni, Sambhogepyutkoce palale apica)
25. Vide; *Vacaspatyam* 766.
26. Yan ca kho mayham amisam, tassa ma patiggahaka bhavathati Ps I 89, 5.
27. *Jataka* No. 548.

ART OF SOUTH-EASTERN BENGAL : AN OVERVIEW

Gautam Sengupta

Over the years, historians and archaeologists have come to recognise the relevance of regional traditions in the study of early South Asia. In the context of ancient Bengal, this was worked out by Barrie M. Morrison¹ on the basis of content analysis of copper-plate charters. But even before Morrison's attempt at systematisation, there was a tacit acceptance of regional variations in the historical experiences of ancient Bengal. Texts and inscriptions mentioned a number of geographical and historical division, the sum total of which made up what had been known as Bengal till 1947.

This essay concerns itself with one such region, viz. South Eastern Bengal. Two ancient geographical terms *Samatata* and *Harikela* denoted this region at different points in its history. The term *Samatata* dates from the 4th century A.D.; the other term comes into use by the 7th century. The territorial extent of the two terms are difficult to ascertain in specific terms. In 1981, Frederick Asher² defined the extent of *Samatata*: "The mountains of Tripura and Chittagong Hills stand to the east, while the Bay of Bengal flanks the southern boundary.....To the north, the Meghna river sets off the region, while to the west the Meghna is joined by the mighty Padma." But the geographical spread of the region cannot be properly appreciated without reference to *Harikela* - a term which in its wider connotation subsumed the limits of *Samatata*. B.N. Mukherjee³ sums up the limits of *Harikela* in specific terms; "The name *Harikela* denoted by c. 7th century A.D. only the Chittagong area of Bangladesh. Later, the name was extended, perhaps with the expansion of the power of the Chandras, from their base in *Harikela* to the areas of *Samatata* and *Srihatta*. There are reasons to believe that at least parts of Tripura including the Belonia subdivision, were also incorporated in *Harikela*. The inclusions of these territories within *Harikela* gave it fairly well-defined natural frontiers. It had Bay of Bengal on the south, hill tracts of Chittagong, easternmost Tripura and Cachar and Lushai Hills on the east, Khasi and Jaintia Hills on the north, joint streams of the Padma and the Meghna, the Meghna and perhaps another river (probably the Surma in the western area of the Sylhet district and in the eastern section of the Mymensingh district) on the west."

This gave South Eastern Bengal a fairly well-defined geographical boundary; it emerged as a distinctive regional identity and, in turn, evolved its own cultural ethos.

As a historical region, South Eastern Bengal came into focus around the fourth century A.D.; by that time it had developed into a territorial entity as a frontier (*pratyanta*) state. The emergence of state could not have been abrupt. Dilip K. Chakrabarti⁴ has argued that the area near the confluence of an old course of the Brahmaputra with the Meghna is a significant zone of early historic occupation. Chakrabarti further suggested that the early historic developments in this area should be explained in terms of local and distant network of exchange and trade. Despite Chakrabarti's assertion, the early historic period in the region remains somewhat obscure.

Barring a cryptic reference in the Allahabad pillar inscription, the region assumes a historical personality by the early decade of the 6th century A.D. Two areas—Sylhet and Comilla plains became primarily important. In the Sylhet plains, an extensive forest tract was cleared to set up a Brahmanical settlement—*Mayurasalmaliagrahara*. At a slightly earlier date, land was donated in favour of a Buddhist Samgha residing in the *Asrama Vihar*, somewhere in the Comilla district. Both are royal grants—the former by the Kamarupa king Bhutivarman⁵ (c.518–42) and the latter by Maharaja Vainyagupta⁶ (c.508 A.D.) a local potentate of considerable authority. Clearly, the beginning of the 6th century ushered in a new historical process in which building programme of religious nature had a pivotal position. The process was accelerated in the subsequent period.

From around the seventh century, the coastal area of South Eastern Bengal started gaining important position. A regular silver currency system was introduced; the South Eastern Bengal and neighbouring north-east India were exposed to the trading world of Asia.⁷ In terms of building activities, the most important area was, however, the Lalmai range and its fringe at the outskirts of Comilla town, on the Comilla–Akshaura road.

Between the seventh and the twelfth centuries, the region witnessed the consolidation and disintegration of a number of ruling families—the Ratas, the Khadgas, the Nathas, the Akaras, the Devas of Comilla and Chittagong, the Chandras, the Palas, besides local powers like Ranavankmalla Harikela Deva of Mainamati and Govindakesavadeva of Bhatera.⁸ The territorial limits of different political authorities at different points of time were not clearly defined, but it was under the Chandras in the 9th–10th century that the political intergration of the region extending between Chittagong and Dacca was achieved. The term 'Harikela' gained its widest possible connotation; till the 13th century local polities invoked this term probably to legitimise their authority beyond their own spheres.

Another aspect that deserves detailed discussion is the nature of royal patronage and its bearing on art-activities. Barrie M. Morrison⁹ has shown that the region is distinguished by its almost unbroken tradition of donating land in favour of religious institutions and communities. This is in sharp contrast to the situation prevailing in other regions, viz, northern Bengal. Beneficiaries between the 6th and the 13th centuries, included head of *Avaivartika Samgha*, *ratnatraya*, *Vendamat Viharika*, *Chandrapura matha*, *Ladahamadhavabhattacharaka* temple and a host of Brahmanas of different *gotra*, *pravara*, *sakha* and *charana*. The involvement of the ruler in this process can be explained on the basis of some copper-plate charters. The Vainyagupta inscription of the 6th century alludes to a *raja-vihara*,¹⁰ the Paschimbag copper plate mentions a Brahmanical settlement which was known as *Srichandrapura*,¹¹ no doubt after the king's name and the Mainamati plate of Ladahachandra speaks of donation in favour of a temple of Ladahamadhava-Bhattacharaka,¹² evidently named after the king himself. Presumably, in all the three instances the role of the king as patron was more than mere invocation of authority. As patrons, kings of South Eastern Bengal had a far more important role to play as compared to their counterparts in Varendra or Gauda. When a king of South Eastern Bengal requested all his subjects to acknowledge the religious gift (*Kirtti*) with due attention, it carried complete conviction.¹³

II

South Eastern Bengal is now divided between Bangladesh and the Indian provinces of Tripura and Assam. In 1981, M. Harunur Rashid¹⁴ proposed a scheme of physical division: (a) north of the Meghna area (b) Comilla-Noakhali plain and (c) Chittagong and Sylhet hills. The first division is defined by the Garo Hills on the north and the Jamuna, Padma and the Meghna on the other three sides. The area is however, of marginal importance to the art-activities in the region.

The Comilla-Noakhali plains 'resembles a rough semi-circle framed by the elongated arc of the Meghna on the west and the more or less straight line of the Tripura hills on the east.' Though politically separated, the plains of Tripura State should be included in this division. Rashid also observed: "On the basis of the evidence provided by a large number of epigraphical records and archaeological discoveries, it is now possible to say with certainty that the Comilla-Noakhali plain constituted the core and bulk, if not the entire territories, of the Samatata of ancient times. The archaeological importance and richness of the region in general and the Mainamati hills in particular hardly needs any introduction."¹⁵

The Chittagong and Sylhet Hills "run in a generally north-south

direction enclosing longitudinal river valleys and merge gradually with the Arakan and Lushai ranges."¹⁶ The Sylhet area can hardly be considered a hilly area. 'The few low ranges projecting from Tripura into the area only serve to break the monotony of the dead plain'.¹⁷ The Barak Valley lying to the south of Assam and the neighbouring Tripura must be viewed as integral part of this division. There is evidence of occurrence of sculptures, architectural fragments and inscriptions in this area. The area, located within extensive sand-stone and shale country, provided the raw-material to the sculptors in the region.

III

Any study of the artistic traditions of South Eastern Bengal, it may be pointed out, at the outset, should take note of two major constraints, (i) the region is comparatively less explored and consequently published materials are relatively meagre; (ii) available literature on the region are concerned with one or two well-known sites. Thus the present essay is necessarily an attempt at working-out a chronological and stylistic framework of sculpture of the region datable between c. 6th and 13th century on the basis of somewhat incomplete documentation.

The genesis of organised art activities in the region is dated to the 7th century, although a Visnu from Balupara, Comilla district,¹⁸ can be ascribed to the c.6th century. The iconographic formula adopted in this figure, with its two back hands resting on *Gada* and *Chakra* are decidedly pre-9th century in date. In visual terms, it closely approximates the Narhatta Visnu¹⁹—even such details as the headgear and the spiral roll of *dhoti* are exactly similar. Another interesting visual element, a line separating the belly from the chest, is seen in both the figures. Baluapara Visnu, however, looks somewhat stunted. Whether this is of local origin remains an open question in view of the absence of contemporaneous material from South Eastern Bengal. Comparable pieces, known in other regions of Bengal, indicate the prevalence of an iconographic and visual tradition derivative of the mature Gupta style of Uttar Pradesh and Bihar. Baluapara Visnu has to be viewed in this context. Going by the testimony of the Gunaigarh Charter, the occurrence of a sufficiently standardised Visnu image should not surprise us.

An inscribed image of the 7th century is a piece of definitive local origin. As early as 1928, J.C.French²⁰ commented on this piece: "The figure of the Goddess Chandi is an example of the art of the beginning of the Pala dynasty. The simplicity, dignity and a certain immanent sense of life and vitality need no emphasis. The archaic smile recalls the art of Greece thirteen centuries earlier." A clear recognition of its unusual visual features, apparently irreconcilable with the mainstream Pala art.

The image described as Sarvani in the inscription, represents an eight-armed goddess standing on the back of a seated lion with a chowrie-bearing female attendant on either side. (Photo 1) There are traces of gilding on the image and the inscription, not without reason, alludes to this and attributes the act (of covering the image with gold leaf) to Prabhavati, wife of king Devakhadga (C.675 A.D.). In compositional terms, the most important element in this image is an oval-shaped rim that tries to unify, somewhat unconvincingly, the main and the subsidiary figures. Three lotuses along the crown as well as multiple arms projected like struts link up the goddess with the rim. Devi stands in a rigid *samapadasthanaka* stance. Her attendants are, however, distinguished by abrupt break of body-axis and relieves the strict frontality of the composition. The modelling quality of figures is derivative of the late Gupta tradition but the stump like rendering of the lower part and the hands is probably a local convention. The facial built of the figures conveys a different mood. The oval-shaped rim-aureole with the link-up devices are, in all probability, a regional innovation, and hardly met with elsewhere in contemporaneous eastern Indian idiom. The date of the image is indeed problematic.

The text, as amended by N.K.Bhattachali, runs thus :

*L.1 Siddhi Svasti Khadgodyamo nama nrpadhirajastat-sunu asid
bhuvijatakhadgah/tadatmajodanapa*

*L.2 tih pratapo Sri Devakhadgo vijitari Khadgah Rajnastasya
Mahadevi mahisi Sri Prabhavati Sa|sa|rvvani-pratimam
bhaktya hemaliptam karayat.*

Bhattachali observed that the characters (of the alphabets) belong to the Eastern variety of Gupta script current in Bengal towards the end of the 7th and the beginning of the 8th century A.D. The record begins by referring to Khadgodyama, an overlord of kings, then it alludes to his son Jata-Khadga. His son Devakhadga is described a sword and a conqueror of all foes. It goes on to state that queen-consort of the king, out of reverence for Sarvani, covered her image with gold. Here is thus, a clear case for dynastic patronage to a worshipable object.

The votive inscription alludes to a specific event—a religious act of some significance. Leaving aside the genealogical portions the text states that the queen Prabhavati, out of reverence, coated (arranged for the coating of) the Sarvani image with gold. Decidedly, the operative part in the record is *hemaliptamkarayat*. This expression stands in sharp contrast to the usual phrases employed in other votive records. The standard formula is to describe the donated image as a *dēya-dharma*, irrespective of the religious affiliation. There are certainly exceptions to this, but the act of donating an image is specified by such terms as

Pratishthitam as in the Shahpur Surya image inscription of the time of Adityasena,²² where the term *deyadharmmoyam* precedes *pratishthitam*. Elsewhere in the much earlier Bodhisattva image of Bodh Gaya of the time of Maharaja Trikamala,²³ the term used is *pratishthapayati*. The word *danapati* does occur in conjunction with *pratapa* to designate Devakhadga, but the intended meaning is most likely, what Bhattasali rendered as 'benevolent and powerful'. There is, thus, sufficient reason to assume that the image was not dedicated by Prabhavati. The text rather implies that the image was in existence prior to the reign period of Devakhadga, and Prabhavati expressed her reverence to the goddess by performing a sacred act of covering it' with leaves of gold'. Probably, Sarvani enjoyed a special position in the local traditions. Prabhavati's gift might be a demonstration of faith to an already existing powerful local goddess.

The practice of offering gold-leaves to an already existing image appears to be somewhat unusual, but historical analogies are not altogether unknown in India. In the Eastern Indian context this is one of the earliest gilded images. N.G.Majumdar²⁴ noticed another gilded piece from Mahasthan in the Bogura district, Bangladesh, datable to c.7th century A.D. A number of Pala period bronzes and, on occasion, even sculptures are provided with gold coating. Reference should be made, in this connection, to the Nalanda Vagisvari image inscription of the time of Gopala II.²⁵ Here the image is described as being tinged with gold streaks : *Sri Vagisvari-Bhattarika Suvarnavrthi-sakta* (Line2). More important however, is the evidence provided by the Sanokhar inscription of the time of Ballalasena Regnal year 9 (1168 A.D.) It refers to the gift of a copper-cover in favour of the god Damacaditya by Cihoka, the chief priest of the said deity's temple; (*tamara-kholi data. Bhattaraka Sri Damacaditadevapadana. Mathapati cihokasya.*) A clear allusion to a gift made towards an earlier image. One can therefore reasonably question any straightway co-relation between the reign-period of Devakhadga and the actual date of the Sarvani image. What the inscription gives us is the terminal date of the particular sculpture—it cannot be under any circumstances, later than the period of Devakhadga and Prabhavati. Despite the inscription, it remains an enigmatic piece.

An uninscribed and tiny image of Surya discovered at Deulvadi, findspot of the dated Sarvani, should be ascribed to the same period, c.7th cent. although the simple, unadorned and bold torso of the sun-god combined with oval and full face bespeak of its indubitable relationship with the standard Gupta idiom. The aureole-format, solid, oval and topped by a flame finial, is different from that of Sarvani. While the Sarvani anticipates a new approach towards form and composition, the Surya retains much of what had already been achieved in late Gupta tradition at the eastern part of the country.

Apart from redefining the Gupta idiom, the artists of South Eastern Bengal, specially those active at Mainamati-Lalmai complex, closely emulated the late 5th century Sarnath Buddhas and their derivatives in Eastern India. A 2.44 m high Buddha recovered from a cell in course of excavation at Rupban Mura,²⁷ illustrates the artist's ability to translate, Sarnath archetype in local medium. (Photo 2) Carved out of sandstone available in the neighbourhood, the figure appears to be heavier—its face certainly more rounded and overall effect of weightlessness is considerably diminished, yet its obvious link with Sarnath form is never lost. If we accept A.K.Shamsul Alam's²⁸ stylistic grouping, then we have to assume that the Rupbana Mura Buddha is not the only example of its kind from this complex.

Two stone-plaques recovered from inside the deep shaft of the central stupa of Kotila Mura,²⁹ reflect artist's attempts at achieving a distinctive form and iconography. (Photo 3) Fashioned out of a locally available clay stone, they depict scenes referable broadly to the Buddhist pantheon. The composition is dominated by springing lotuses pervading the space. The Buddha in *vyakhyanamudra* is seated on the principal lotus. And eight other lotuses accommodate subsidiary figures. In spite of its apparent similarity with the miracle of Sravasti, there are several iconographic deviations that preclude the possibility of such an identification. The other plaque largely repeats the compositional mode set out by the former. It has a four-armed Avalokitesvara seated on the principal lotus whose stem generate smaller lotuses; each in turn accommodates attendants of the deity. Avalokitesvara is distinguished by *Jatabhara* and a three-quarter profile view of the face. What strikes us most in the compositions are the elaborate and innovative treatment of the base and a sense of volume attached to the figures. The elaborate base would soon become an important visual formula. Despite the erosion, one is reminded of the excellent lotus carved on the dado of stone-temple at Nalanda datable to the 7th cent. A.D.³⁰ But the iconography of the plaques remains problematic—possibly an indication of a distinctive iconic tradition of the region.

A group of bronze images excavated at Mainamati brings out the line of development along which the sculpture of the region moved for some centuries. Coming mostly from Salvan Vihara, they are of Buddhist affiliation. M.H.Rashid³¹ has classified them into two categories: (i) coarsely executed images and (ii) refined images. This somewhat oversimplified formulation fails to recognise the existence of two distinct albeit parallel perception of form at Mainamati and some other related sites.

The most conspicuous element of the first group is oval-shaped rim aureole to which the divinity is connected by means of flowerets and

projected struts. Technically this is continuation of the method initiated earlier in the Sarvani image. The figures are seated on double-petalled lotuses surmounted on two-tiered rectangular pedestals. But more significant are the features, which at the first glance, appears to be works of perfunctory workmanship. The treatment of surface is coarse, the eyes are wide open and shown by incisions, narrow shoulders, eye brows raised and the lower lips outturned, mouth at times shown by cut-slit. On the whole they convey a mood quite different from what is observed in the dominant Eastern Indian bronzes. A number of miniature Buddha images recovered earlier from Mainamati pertain to this group. Stylistic proximity to the dated Sarvani as well as the stratigraphic cerdence points to a date not later than 8th-9th century A.D.

The second group is distinguished by oval-shaped solid aureole with flame motifs interspersed on the outer periphery. The pedestals are sometime simple two-tiered rectangular seats with double-petalled lotus, but more complex arrangements with central lotus and foliages on both the sides are not unknown. Visually, these features link the second group with the two plaque discussed earlier. Tara and Manjusri are two most popular iconic types represented in this group. They have rounded and well-modelled physique, especially when compared to the figures of the first group. Of special importance is full rounded breasts of Tara and smooth, easy grace of Manjusri.

Stylistically related to this group are two bronzes, a Sitapatra from Tippera district³² and Buddha from Dharmaghar, Sylhet district. (Photo 4) The goddess is seated on the pericarp of a double-petalled lotus supported by elaborate scroll-work at the centre and Gajasimhas on the lateral. The rectangular base is two-tiered with *tri-ratha* arrangement. The semi-circular stela is an elaborate affair; the inner core defined by beaded border, on the outer rim are flame motifs. And a parasol with fluttering banners crowns the stela. The eight-armed goddess sits with one leg resting on a lotus. She has a soft and sensuous body with rounded breasts. The easy and natural grace of the goddess has much in common with the Tara images of Nalanda datable to the 9th century A.D.

The Dharmaghar Buddha sits under a stylised Bodhi tree, displays Bhu-sparsa-mudra, holds an unidentifiable object on his left hand. The compositional features like (i) the plain base with sprouting foliage and lotus seat, (ii) an almost oval stela encircled by flame motifs spaced on regular intervals, (iii) a crowning member in the form of an ornamental triangle-recalls some motifs unknown, so far, to this area. The wavy lines and cable design are significant. The figure appears to be somewhat stunted in proportion. Of singular iconographic interest is the unidentifiable object on Buddha's left hand. On the analogy of Salvan Vihara bronzes,

the piece may be dated towards the close of the 9th century A.D. It may even be an import from one of the more prolific Mainamati sites.

The bronze Lokanatha from Bandarbazār, Sylhet district,³⁵ is a tall and slender figure. (Photo 5) The sense of height is emphasised by relatively longer legs supporting a sensitive torso. The subtle dehunchment imparts a feeling of movement. The deity stands on the pericarp of a double-petalled lotus surmounted on a two-tiered pedestal. The inner core of the oval stela, bare except for a beaded line all along its border, contrasts favourably with the outercore marked by close-knit flower motif terminating in an ornamental triangle.

Lokanatha, like the Sitapatra, is derived from Nalanda archetype. Their overriding simplicity, ensured by noble physique, springs from the stylistic idiom of the 9th century A.D. initiated at Nalanda and diffused therefrom through a chain of Buddhist centres.

A 'bronze-coated iron plummet from the River Surma, Bengal in the British Museum'³⁶ is another problematic piece. (Photo 6) Coomaraswamy listed it among 'some of the more important examples' of Gupta sculptures. Following Coomaraswamy, Benjamin Rowland³⁷ assigned the piece to the 6th century and compared the group of dancing figure on the neck of this object with the bacchanalian reliefs of the Kushana period at Mathura. Drawing the analogy further, Rowland observed: "The weight is framed in prongs terminating in lotus buds which recall the pliant, decorative forms of ornamental Gupta sculptures." It, however, dates from c 9th century.

Apart from Mainamati, Jhewari in Chittagong district and Pilak area in South Tripura are immensely productive in terms of find of metal sculpture. As early as 1920, K.N.Dikshit noticed a number of bronze images deposited at a modern monastery at Chittagong town. Occurrence of bronze images ranging in date between the 9th and 12th/13th centuries A.D. at Chittagong was viewed with caution. Not surprisingly, Dikshit³⁸ observed: "The bronzes are similar in workmanship to the Nalanda bronzes and it is possible to imagine that the worshippers in this remote corner of India requisitioned images from more inland parts of the country, unless they had them manufactured locally in imitation of models obtained from the Magadha country."

The discovery of a hoard of 66 metal figures from Jhewari village in 1927, however, necessitated a re-consideration of import-imitation hypothesis. Slowly, but steadily, art historical studies have come to accept the importance of Jhewari bronzes in the domain of early medieval art of Eastern India. Two recent works are addressed specifically to the Jhewari figure—one is an exhaustive iconographic study,³⁹ the other an analysis of stylistic features⁴⁰ of Jhewari Buddhas.

Jhewari figures are almost without exception Buddhist in affiliation and represent Buddha in *bhu-sparsa mudra* (33 Nos. from Jhewari), Buddha standing in the *abhaya-mudra*, seated in *dhyana* or *vyakhyana mudra*, in *vajrasana* attended by the Maitreya and Abalokitesvara, Vajrasattva, Padmapani, Manjusri, Vasudhara etc. They range in height between 3.75 cm. and 5.02 cm. Six of the Jhewari images bear undated votive inscriptions which have been palaeographically assigned between the middle of the 9th and 10th century A.D.⁴¹

Three distinct stylistic groups can be worked out from among the whole range of Jhewari bronzes. a) Some of the bronzes closely approximate Nalanda or the dominant Pala idiom—so much so that some scholars have even suggested that they are metal versions of East Indian stone sculpture, b) others relate to Mainamati idiom c) a few display features reminiscent of Burmese statuary. Many of the compositional and iconographic elements discernible in each group owe their origin to Nalanda imagery. And in some instances, as in the Vasudhara, even the physiognomical features, like her sensuous and fully modelled body, are inconceivable without reference to a 9th cent A.D. Tara of Nalanda.

The figures are usually seated on simple rectangular pedestal with superimposed lotus. They are conspicuous by plain drapery and sparse ornamentation. The aureoles are either circular or oval. Although the torso is often bathed in a charming sensuousness, the face presents an uncanny mood through the bulging eyes, raised eye-brows, outturned lower lip and sharp chin. A Buddha stands in a perfect *samapada* stance with his right hand raised in the *abhaya-mudra* and the left holding the end of the *samghati*. The diaphanous robe comes down in a sparrow's tail formation. In many ways it closely approximates standard Sarnath Buddha. The judicious arrangement of melting planes converging into an unified form is derivative of Sarnath experience percolated through 9th century Nalanda. But the open eyes, protruded *ushnisa*, raised *urna* and comparatively broader shoulder and narrower waist, distinguish it as a local product and it sets forth a basic psychology for the East Indian Buddha types. viz, an awareness of the mundane world.⁴² It can be definitely placed in the early part of the 10th century A.D.

Compositionally interesting is a group, probably only of its kind at Jhewari, depicting Buddha in *vajrasana* flanked by Maitreya and Avalokitesvara. All the figures are accommodated on a wide *tri-ratha* pedestal, the Buddha being on a double-petalled lotus. His head, as also the heads of Maitreya and Avalokitesvara, is framed by circular halo. An almost crescent shaped rim links up the principal figure with the subsidiary ones. The method is reminiscent of Sarvani image. The rim is topped by the *chatra*, *stupa* and fluttering banner. An image, described as Sri in the

inscription⁴³ at its base, discovered somewhere in Chittagong district has been dated between the 9th and 12th centuries A.D. but more likely to the 12th cent. A.D. It shares much of the facial features of Jhewari statuary, but its physique is relatively thin; somewhat removed from the general run of Jhewari.

A small number of bronzes, most conspicuous among them are three Buddha images seated in *bhu-sparsa mudra*, reveal some features which closely resemble the Burmese idiom. (Photo 14) In these images, the flap of the garment is suspended from the left shoulder leaving the right shoulder bare. The otherwise unadorned torso has a line that rise at the middle of the left shoulder and comes down below the right arm-pit. The distinctive facial features are deep curve below the eyes and sharp ridged line along the eye-brow. These features relate them to the Buddha images of Burma and Thailand. Palaeographic evidence suggests that these images can be dated between the middle of 9th to that of the 10th century A.D.

Compared to Mainamati and Jhewari, Tripura bronzes⁴⁴ are very inadequately known to the scholarly communities. Proximity of the province to the districts of Comilla and Chittagong shaped the course of development of style and iconography of Tripura bronzes. Like other parts of South Eastern Bengal, Tripura bronzes occur, mostly, in the Buddhist context, at Pilak-Pathar and the neighbouring hamlets, viz. Jolaibari, Bathalbari, Tulsipahar and Hrishyamukha. In 1976, Debala Mitra⁴⁵ suggested the possibility of identifying Pilak with *Pilakka-Vanaka* mentioned in an eighth century inscription of Anandachandra Deva, king of Arakan. Excavations conducted at Shyam Sundar Tila have revealed the existence of a Buddhist shrine datable to c. 9th-10th century A.D. Barring a few pieces, Tripura bronzes are mostly Buddhist in content, representing the Buddha, Avalokitesvara, Tara, Manjusri, Hariti-Panchika etc. Among the brahmanical icons are Visnu, Devi and Ganesa. These are broadly datable between c.9th and 12th centuries.

Chronologically, the Avalokitesvara of Pilak should be considered earliest of the Tripura bronzes. (Photo 7) The deity stands on the pericarp of a lotus, and is framed by a long halo with semicircular top crowned by a triangular motif. The edges of the halo is marked by beaded border with tongues of flames at intervals. The figures, assigned to about the 9th century A.D. however, appears to be somewhat earlier in date. Its stunted appearance combined with austere halo and simplicity of flame motif suggests a transitional date, somewhere between the Deulvadi Sarvani and the Nalanda-Kurkihar Balarma-s of the time of Devapala.⁴⁶

Another bronze image of South Tripura relates to the transitional phase. Tulsipahar Visnu combines features of seventh and late eighth century pieces of south and north Bengal. (Photo 8) Some of the elements,

like unadorned lotus base and plain architrave supported by totally undecorated pillars, evoke similar features noticed in Manir Tat Siva datable to the seventh century A.D.⁴⁷ Again, the configuration of the aureole with well-balanced, boldly rendered flame motifs, seems to have evolved out of the halo of the aforesaid Siva and related pieces. A singularly important feature is the pinning-up device by which the main figure is attached to the frame. The method is found used in a number of bronze figures from eastern and northern Bengal, such as, Siva-Lokesvara of Barisal⁴⁸ and the two Visnu, probably from Mahasthangarh.⁴⁹ In Tulsipahar Visnu a penchant for angular treatment of the faces of the main and subsidiary figures is pronounced. One does not fail to notice the pointed thin and inverted triangle-like shape of the eyes. Probably the artist had tried to infuse distinct local elements even when working within the limits of certain general denominators.

Admittedly, Buddhist bronzes of south Tripura owe much to Jhewari and related sites of Chittagong district, Bangladesh. Compared to Jhewari the role of Mainmati appears to be much less significant. Eastern Indian idiom was redefined in Jhewari, which in turn, contributes to the spread of the redefined version. A standing image of Buddha, which is based on Sarnath-Kurkihar archetype, illustrates the change. (Photo 9) The lines of the drapery are more rigidly defined with the lower part of the hem of the upper robe given a wavy fold-like appearance. Equivalents of the ninth century Buddha are not difficult to locate at Jhewari.

A group of Avalokitesvaras and Taras shows in various degrees articulation of distinctive elements. (Photo 10) The distinctiveness manifests itself in such features as bulging eyes shown by incised lines, an unusual head-gear of the male deity and summary treatment of the limbs. The simple rectangular seat, absence of decorative elements of the stela and such other features suggested that the piece in consideration cannot be dated later than the tenth century A.D.

Another Hariti And Panchika from the same period, but in spite of bulging eyes, they are very much akin to standard examples where a greater degree of sophistication in rendering the form is evident. A seated image of Buddha or Ratnasambhava is also referable to the Mainamati tradition. It has its counterparts in a group of tiny bronzes from Mainamati. The standing figures of Avalokitesvara and Tara are decidedly sturdy in their overall appearance. They seem to have an agitated look—an impression conveyed by the wide open eyes. A Chunda from Jhewari, marked by a sturdy build, comes close to this type. The modelling quality of the figures points to a date around the tenth century A.D.

Some of the figures are conspicuously related to the dominant idiom of eastern India. Two Bodhisattvas are illustrative of this phase. (Photo 11)

The sensitive modelling quality and smooth flow of the line as well as simple tiered pedestal reinforce a date close to the tenth century AD. Another significant example is a bronze Devi from Hrishyamukha. The goddess stands in rigid stance on a lotus, her attendants on either side are distinguished by exaggerated flexion which is in sharp contrast with the frontality of the figure. Her longish face conveys a weird mood. It is one of the finest bronzes of Tripura where rounded limbs and sensuous flesh gives the impression of the piece being carved in stone. The evolved nature of the stela and sharp angles of the *Rathaka* mouldings suggest the date to be eleventh century AD. One cannot, however, underplay the Mainamati connection. A miniature *stupa* recovered from an unspecified site of South Tripura can possibly be explained in terms of links with Eastern Bengal, (Photo 12). It belongs to the stylistic-inconographic tradition articulated in the elaborate copper-chaitya from Ashrafpur, Dacca district, Bangladesh.

The only known bronze of Northern Tripura is a Hevajra, enshrined in a temple at Dharmanagar. It is most likely an import from eastern or northern Bengal. An eleventh century visnu of Sahebganj, Rangpur district⁵¹, sets the trend for this kind of composition. Dharmanagar bronzes cannot be properly accommodated within the general framework of evolution of metal images in Tripura. Equally problematic are the Durga of Sonamura and two Ganesa recovered from unspecified sites of Southern Tripura and datable to C. 9th century. They can only be explained as imports from Eastern Bengal.

We may close the discussion on the bronzes of South Eastern Bengal with reference to three miniature metal images from Comilla, noticed by Stella Kramrisch in 1928.⁵² She tentatively dated these pieces—viz. a Gaja-Lakshmi, a Visnu and a Hariti-Panchika (?) to C. 10th–11th centuries, and commented on their striking similarities with metal sculptures, known from Nalanda, Rangpur and Rajshahi. The bronzes are cast in standard Eastern India style. Visually, they have very little in common with the Mainamati bronzes. It is quite likely that the three Comilla figures were manufactured beyond South Eastern Bengal. As portable religious objects, they entered the region at an unspecified date, somewhat like the Dharmanagar Hevajra and Sonamura Durga discussed earlier. These pieces are certainly extraneous to the region, but they probably indicate the extent of contact South Eastern Bengal had developed in the pre-modern period.

Bronzes of South East Bengal's origin are known from the neighbouring regions and distant countries. The condition under which bronzes from this region travelled to different places can not be explained satisfactorily.

In 1962, P.C. Choudhury⁵³ noticed a bronze hoard from Kahalipara, in the suburbs of Gauhati in Assam. There were twenty-one sculptures

in the hoard representing deities of the Brahmanical and Buddhist pantheon, as well as folk divinities. Broadly, they are assignable between the 9th and the 11th centuries. The bronzes draw upon different stylistic traditions prevalent in early medieval Eastern India.

Occurance of Buddhist images are difficult to explain in terms of local situation—there is almost nothing to suggest⁵⁴ the prevalence of any form of Buddhism in the Brahmaputra Valley in the early period. An eight handed Chunda seated on a lotus pedestal is definitely a product of an atelier of South Eastern Bengal. (Photo 13) It has been suggested that the style (of the Cunda image), though fundamentally of the Eastern schools, bears distinctive traits that characterise a local dialect seen in metal images from Chittagong in Bangladesh. Apart from the obvious similarities in the physical form, even the aureole—format topped by a fluttering banner has its counterpart in many bronze images of Samatata–Harikela areas. Another Avalokitesvara of Kahalipara hoard, an unmistakable product of Mainamati, is comparable with a Manjusri from the same site. Both the pieces should be placed to the middle of 9th or the early part of 10th century.

More problematic is the occurrence of a bronze Visnu from an unspecified site of Java, now preserved in the Rijksmuseum voor Volkenkunde, Leiden, The Netherlands. Susan L. Huntington⁵⁵ suggests that it was brought to Java at an early date to serve as a model for Javanese artists. She has argued in favour of its south eastern Bengal origin. Huntington observes : "In this sculpture, the configuration of the architectural construct behind Visnu relates to numerous examples from south-eastern Bangladesh. Also, the zigzag design in the uprights and cross bar is a motif found in other examples from the region. The solid halo is interesting in the light of the fact that many metal images of Javanese manufacture have this feature. Based on comparison with securely dated metal images from the Pala region, a date of mid-ninth century may be suggested for the piece." A number of Buddhist bronzes of South East Bengal origin, found in Java and Thailand, are deposited in different museums. (Photo 14).

IV

If the institutionalised Buddhist context partially explain the radiation of standard Eastern idiom in an outlying region, then the surfacing of popular and informal elements through the medium of terracotta has to be understood in terms of somewhat different levels of patronage and perception. A large number of terracotta plaques have been unearthed at Mainamati.⁵⁶ Their chronological position, as discussed in some recent works, are uncertain. The stratigraphic evidence revealed by 1967–68 excavation,⁵⁷ indicates that a period later than the 8th century A.D. marks the beginning of terracotta tradition at Mainamati. Frederick M. Asher⁵⁸

observes that the earliest phase is represented by a single course of terracotta panels adorning the plinth just below the level of Bhavadeva's construction at Salvan Vihara.

Mainamati terracottas offer a wide range of themes, sacred and mundane, decorative and narrative. Much of the themes and motifs emerge out of a common artistic and iconographic tradition and can be traced to Nalanda⁵⁹ (Temple Site No. 2; dado panels), Antichak⁶⁰ and Paharpur.⁶¹ However, local elements surface in the delineation of human form with bulging eyes, raised eye-brows and outturned lower lips. In a recent study⁶² it has suggested that some of these traits occur for the first time in an incipient manner in a group of terracotta panels attributed to the third phase at Paharpur. At Mainamati they are much more pronounced. And the whole range of human forms are marked with this distinctiveness. Of historical significance are the occurrence of Burmese ethnic type dressed in their typical attire.

A sense of freedom pervades the terracotta art of Mainamati. Men and women are depicted in all possible poses and gestures : men fighting the beasts; warriors holding the shield and dagger; archers; acrobats balancing their uplifted bodies; a Brahmin accompanied by his family; bemoaning lady; standard bearing woman rushing towards a shrine; Gandharva playing on a *damaru*; Kinnara beating the time with his hand; Vidyadhara carrying a garland or a sword; yaksa performing tarpana. These are some of the most lively scenes delineated of the early Indian terracottas. A sage dancing wildly; a man making vain attempts to learn the tact of holding weapons; and a father and his son carrying a donkey on a pole are some of the plaques where the comical mood is conveyed. In series of monkey studies—grinning monkeys, the monkey chief decked in *yajnapavita* sitting gravely on his haunches, a monkey carrying pot with holes, a monkey helping another member of his stock to climb a tree, etc. One is reminded of frolicking monkeys on the window bordering the *mukhasala* of Muktesvara Temple at Bhuvanesvar.

Animal world is portrayed with an unusual sense of freedom and warmth. Chameleon and squirrel on the treetop, serpents and reptiles, striped tiger, wild boar, rhinoceros, bull with the raised tail, running antelope, elephant caparisoned or marching in a majestic gait, come up side by side to picture a varied world. Animals are usually rendered in profile. This highlights the sense of movement and offers greater scope to project the grace and charm of animal forms. The Artist's experience seemed to be immense and imagination almost unexhaustible; they go on creating and recreating their favourite forms, Trivial to majestic with an air of informality. Some of the motifs, however, are conventionally treated. The *makara*, *vjala*, *muktaphala lobhi hamsa* —to name a few. Possibly

these were mechanical imitation without its root spreading to the artists world of experience. It is, curious that most of the monuments accommodating the terracotta plaques came into being on account of the royal patronage, but the environment depicted by the plaques belong to an altogether different milieu. This inherent dichotomy is difficult to resolve. The stylistic idiom radiated towards the east of Mainamati. Terracotta plaques, adorning the base of a *stupa*, at Pilak in Tripura⁶³ are datable to c.9th–10th century A.D. They are unmistakably influenced by the neighbouring Mainamati idiom.

While the bronze figures and terracotta plaques ranging in date between the 7th and the 12th centuries A.D. underscore the existence of a distinctive trend, the contemporaneous stone sculptures and wood carvings from the area largely adhere to the dominant early medieval idiom of Bengal. Not many stone sculptures are known from the area, but amongst the scanty finds are quite a few inscribed images bearing dates in the regnal years of the Pala or Chandra Kings. These pieces indicate the historical context of radiation of Pala style in South Eastern Bengal. The corpus of dated image runs thus⁶⁴: an image of Ganesa discovered at Mandhuk, Tippera district, is carved in the 1st regnal year of Gopala (II) (C.940 A.D.), a Trivikrama Visnu from Baghaura, Comilla district bears a date in the 3rd regnal year of Mahipala (I) (C.991 A.D.) a Ganesa from Narayanpur, Comilla district dates to the 4th regnal year of the above mentioned ruler, (992 A.D.), a fragmentary Nataraja from Bharella, Comilla district, is dated in the 18th regnal year of *Laya (da) hada chandra* (1018 A.D.), two Surya images, one known from Sandeep, Noakhali district^{64a}, and the other from Kulkudi, Faridpur district, bear dates in the 12th regnal year of Govindachandra (1032 A.D.). The dated pieces along with several other uninscribed ones are fashioned out of black stone, probably *shale* – a material available in the region. A number of sculptures insignificant both in term of output as well as the manner of execution, were carved out of a local variety of sandstone available from Lalmai Hills and Tripura ranges. The poor texture of the stone tends to obliterate most of the details and makes any stylistic study well nigh impossible. Tara from Lajair⁶⁵, a Garudasana Visnu from Chittagong⁶⁶ and another Visnu from Silua of Noakhali⁶⁷ may be cited as relevant examples.

Black stone sculptures of the region share all the features in common with standard early medieval idiom of Eastern India. The configuration of the stela, *rathaka* arrangement of the base, decorative scheme, the stances and gestures bespeak of common stylistic and iconographic sources. Visnu image from Baghaura⁶⁸ is illustrative of this. Not only do we notice standardised features and *triratha* base, accommodation of Lakshmi and Sarasvati within miniature stelai, *vyala* and *vidyadharas*, but

such smaller details as the crossbar with intricate floral motif along the shoulder to the God. The Nataraja from Bad Kamta⁶⁹, though fragmentary, is almost indistinguishable from those discovered in Dacca district. And this similarity becomes all the more evident in a Nataraja image known from Palgiri in Comilla district. Some of the more significant sculptures from the area distinctly reiterate their stylistic affiliation. A Surya from Pakilara near Mainamati,⁷¹ is a fully evolved iconic type with eleven *Adityas*, *Ganesa*, *Danda Pingala*, *Usha-Pratyusha*, *Aruna* and the seven-horses. A *chatra* and the flying *Vidyadharas* complete the stela. An Uma-Mahesvara from Jethagram, Tippera district,⁷² has an inscription at its base. The sculpture is one of the best examples of simple and effective composition. The stela pointed towards its top, is completely unadorned. A *chhatra* is depicted at the top. On either side of the *chhatra* are miniature representations of Kartikeya and Ganapati. The divine couple sit on a double-petalled lotus. The base of the stela is almost devoid of the *rathaka* projection. The principal figures are distinguished by elongish facial-built and thin physical appearance have an over-powering sense of effortless grace. It is difficult to reconcile the stylistic features with the evidence of the inscription; the visual elements point to a date not later than the 10th Century A.D.

In the neighbouring Tripura, the artists opted for two varieties of stone viz., coarse grained sandstone and shale. Both the rock-types are available locally. Close to Pilak, Jolaibari is the source of Hrishyamukh sandstone bed and between Udaipur and Mohari occurs Gajala shale. As we shall see, the occurrence of sculpture-yielding sites in Tripura is conditioned by the location of the material.

We have already indicated that three clusters of sites in Tripura are known to have yielded stone-sculptures. Pilak-Jolaibari-Hrishyamukh cluster is decidedly the most prolific.⁷³ Excavations at Pilak have revealed a Buddhist *stupa* datable to C.9th century. But apart from the buddhist *stupa*, there must have been a number of Brahmanical establishments in the locality. This explains discovery of stone-sculptures depicting Brahmanical deities and their exploits, along with numerous Buddhist figures.

Udaipur, by contrast, presents a homogenous situation. Sculptures known from and around Udaipur are unmistakably Brahmanical. However, at Unakoti, we come across sculptures carved on detached stone slab and on the rock surface. All the figures from Pilak-Jolaibari-Hrishyamukh cluster are carved in sandstone. The most distinctive visual elements are slim and compact torso being supported by tall and slender legs. This results in an effect of weightlessness.

The artist must have worked from a Sarnath prototype. Sarnath Buddhas were imported to Varendras. Even in Mainamati and Jhewari,

the impact of Sarnath idiom was clearly perceptible. It is not surprising that the sculptors of Pilak-Jolaibari area should turn to Sarnath.

The impact of Sarnath is most vividly reflected in an image of Buddha from Pilak. (Photo 15) Its rounded modelling, transparent drapery and serene contemplative expression bear the imprint of the Sarnath idiom. Even the details are faithfully copied. The Pilak Buddha holds the end of the drapery in a way which is an exact reproduction of the particular device in the Sarnath figures. However, the figure cannot be dated earlier than, the 9th century. Most of the Buddhist figures—Avalokitesvara, Chunda—are also assignable to this date.

Visually somewhat different are the Brahmanical figures from this area. Compared to slim and compact figures of the Buddhist pantheon, the Brahmanical deities are heavily set with shirdier built. The figures of Surya, Narasimha, Andhakasuravadha form of Siva and Devi are some of the distinctive examples. (Photo 16) The probable stylistic origin of these sturdy figures cannot be ascertained with any amount of precision. Udaipur sculptures, carved in shale, conform to the (Photo 29) Eastern Indian idiom in all its essential details. The pointed stela format crowded with a host of subsidiary figures, ornamental designs and motifs are very close to the 11th–12th century pieces of Eastern Bengal. It is not unlikely that the Brahmanical statuary of Udaipur were carved by an itinerant group of artisans from the neighbouring Vanga country, or imported from that area through neighbouring Comilla.

To the north Tripura, the evidence of stone-sculpture is known from an enigmatic site in the Borak Valley. Bhuvanpahar, about 25 miles east of Silchar, is 3000 feet above the sea-level and demarcates the Cachar plains of Assam from the hill tract of Manipur. A number of stone sculptures are preserved in a make-shift temple on the hill tops. Besides, another sculpture, from this site is now kept in a school at Silchar. (Photo 17) The sculptures are carved in sand stone and shale—both the rock-types are available in the hillock and its surroundings. The figures of Garuda, Devi, Ganesa and an unidentified deity are decidedly of Eastern Indian idiom. The details are lost and the figures are abraded. But there cannot be any uncertainty on their stylistic affiliation.

But, a group of three figures, worshipped as Rama-Lakshmana and Sita, are definitely of a different genre. Their highly cylindrical torsos, supporting rounded heads, show simplified forms which must have originated in an altogether different artistic milieu. In visual terms, their closest equivalents are to be found in some of the late medieval carvings now on display in the Manipur state Museum. (Photo 18) The puppet-like figures stand outside the main course of stylistic evolution of art in South Eastern Bengal and reflect a genuine ethnic perception of form.

Apart from the stone sculptures, a small number of wood carvings also underscore the impact of early medieval Eastern Indian idiom. A wooden image of Visnu from Krishnapur, District.Tirpura, has all the usual features: the Kirttimukha at the top of the stela, garland bearing Vidyadhara, double-petalled lotus, and base-moulding of a standard Early mediaeval image. Extremely fragile condition of the image (as can be made out from the photographs) goes against a precise dating, but its general features indicate a date around the 11th century A.D.

A more elaborate composition, a wooden piece from Comilla district,⁷⁵ merits detailed discussion. Arranged in three horizontal section, it depicts a Jina seated in *dhyanasana* underneath the triple canopy with three attendant to the right. The middle section is crowded with a number of figures and the lower shows miniature Jinas and devotees. (Photo 19) The principal figure has an atheletic proportion accentuated by rounded modelling, expansive torso and a broad facial built. Leaving aside the miniature Jina on the lower section, all other figures are permeated with a sense of animation. None of them are aligned in a strictly frontal pose. An inarticulated sense of angular treatment defines these figures. Thinly etched lines indicate the eyes that touch the tip of the earliest wood carvings known from Bengal and its overall similarity to the Post-Gupta idiom tends to suggest that it dates from the 9th-10th century A.D.

Throughout the essay, we have tried to identify the local elements in the art of South Eastern Bengal. Often, the distinction between the local and supra-local elements are difficult to pin-point because of the long process of osmosis.

However, at Bhuvan Pahar we have come across a set of sculptures that are decidedly shaped by the visual traditions quite different from the traditions that shaped most of the figural sculptures of South Eastern Bengal. Two other sites, Unakoti and Deotamura in Tripura, introduce us to a group of figures, whose stylistic-iconographic features cannot be satisfactorily explained in terms of the main-stream art idiom of the region.

Unakoti figures are carved on sandstone interbands within the expanse of Shale country. The rock-cut images defy diffilliations with any known style. However, a number of detached stelai conform to the East Indian style between the 9th and the 12th centuries. The ponderous figure of Visnu, for example, is wrought against a plain stela with a rounded top. It should be placed to C. 9th-10th century. Uma-Mahesvara figures with slim and attenuated limbs are datable to the 11th century; and a Trimukha Siva Linga with highly schematic treatment of thickly arched eyebrow and lowerlips shaped like inverted triangle pointed chin must be dated to the 12th century. A 12th century votive record from Unakoti mentions Sri Jayadeva-probably one of the patrons of the religious complex.

The rock cut figures are totally different—both in style and content. All along the rock-surface, even in detached boulders, are carved an amazing range of heads, tentatively identified as of Siva. The most representative example is a colossal Siva head (Photo 20) about 30 feet in height and almost rectangular in shape with the indicated by incised double lines without any representation of pupil; the nose descends almost as a straight line; the mouth is shown by a long narrow slit with vertical strokes indicating the teeth. The incised moustache takes an upward turn and culminates in a loop. Similarly the ears are shown by carved double lines with circular floral motif. Headgear, by contrast, in an elaborate affair, rendered like a basket with vertical and horizontal lines intersecting each other and decorated with beads and logenzes. Unakotisvara kala Bhairava in popular parlance, this colossal head is the presiding deity of the site. Other carvings depict human figures both male and female. Such as Ganga, a female figure carved above the central head, as well as a group of figures seated in different positions. In addition to these there are figures of Ganesa and an arrow-shooters. It is indeed difficult to identify most of these figures in terms of known iconographic texts. One cannot, for example, identify the female figures seated with their legs spread out with any degree of certainty. The identification of Ganga for that matter does not carry much conviction. Equally problematic is the iconography of the Ganesa group. They are shown standing erect and seated in a position which comes very close to *Utkatikasana* with a *Yogapatta*. Each of the Ganesa is distinguished by three or four tusks and six or eight hands, holding the noose, they have conch depicted on their ears—a feature not probably known elsewhere. Some of the later texts like the *Pranatosini Tantra* refers to multi-handed Ganapati with several emblems. But, the area of agreement between the Tantric text and Unakoti figure seems to be rather narrow. Clearly, a text-oriented explanation is difficult to establish.

The most important visual element is almost total negation of three-dimensionality. Their imposing dimensions, notwithstanding, the carvings are conceived and visualised in flat and two dimensional terms without any attempt at modelling. Sculptors have, however, made very judicious use of the rock, they utilised the depressed and raised surface to affect certain anatomical features. The rock cut figures convey pictorial effect which is most convincingly articulated in the treatment of the Ganesa group where the figures stick as it were to the surface and refuse to emerge out of the depths of the rock. The movement is almost non-existent and wherever some little indication is available they fail to be convincing in visual terms. It is essentially an art of surface. And the

visual concept of the artist is heavily restricted within a set of forms, repeating themselves all along the rock-surface.

Clearly, two distinct visual traditions characterise the Unakoti carvings. Art-historical scholarship accepts two basic concepts in art, viz. primitivism and classicism. Waldemar Deonna, spirited, though a little mechanical, defense of the two traditions help us in situating Unakoti carvings in proper perspective. Deonna identified a number of important traits of primitivism : i) arbitrary treatment of human body ii) ornamental character iii) intellectual realism iv) primacy of surface v) repetitiveness vi) the geometric spirit vii) symmetry viii) lack of observation ix) lack of geometric evolution and x) Anonymity. Most of these traits are very clearly articulated in the rock-cut figures. One can for example, think of the gross enlargement of ear—totally disproportionate to the eyes, or of an isolated head in between two figures. Similarly, ornamental character manifest itself in the rendering of elaborate head-gear of Siva or Ganesa, and this brings us to the element of repetition, many of the motif like detached head are found carved all over the surface and sometime around on detached boulder, thus effecting a pattern. The concern with the surface is too evident, figure after figure, even in probably narrative panels, there is hardly any attempt at going into the depth and thereby bringing out movement. Movement whatever little exists, is restricted to a turn or a bend in the body axis. Even in the depiction of an arrow shooter, the effect is almost static. Sometimes, figures and patterns are merely etched. Another important element is the geometric spirit - almost all the carvings are conceived and worked out in rectangular, triangular or circular shapes. And despite thematic variation, there seems to be no meaningful evolution of style.

We are confronted with a range of problems connected with the origin, chronology and historical context of the style. Most of the questions cannot be satisfactorily answered.. One must begin by recognising that a) the rock-carvings are ethnically conditioned; b) they do not have any parallels in Eastern and North-Eastern India and c) there should be some links, howsoever remote it might be, between the two groups viz. *stelai* and rock-cut figures.

Ethnic dimensions of Unakoti carvings found clear articulation in a couple of figures, some of which can hardly be explained as religious. For example, the male figure with a bow and arrow, his right leg stretched forward while the face is totally frontal, and his consort holding an indistinct object, should be viewed as a tribal couple - the effect heightened by the headgear decorated with feather and such features as ovoid face, sunken nose and small mouth. There is a marked contrast between, the treatment of eyes in such tribal figures and those in the Siva head. (Photo 34) I am inclined to think that the so-called Ganga as well as the

two seated figures are similarly permeated by ethnic features, although on a reduced scale. Their seats are decorated by criss-cross pattern which has close parallel in tribal basketry.

The absence of comparable material from Eastern or North-Eastern India seriously affects a proper understanding of the style and iconographic programme. Usually, the rock-cut traditions and detached stela tradition are products of an identical style, whether it is Eastern Bihar or the Brahmaputra Valley. But here at Unakoti, the situation is altogether different. Stylistically, one is antithesis of the other. Although, one cannot overlook certain degrees of commonality in the iconographic programme. Whereas the flat silhouette of the enigmatic figures is a total negation of east Indian style as it evolved between the 9th and the 12th centuries, the iconographic elements do not mark a total break from the past. In the context of the stylistic development of East Indian sculpture, it had been the endeavour of the artist to gradually detach the figure from its lithic background and to achieve the effect of free-standing three-dimensional form. Here at Unakoti, the carvings refuse to be separated, as it were from their substance. This would not have been possible without a fresh start and a concept altogether different from what had prevailed so far.

Unakoti experiments were repeated on a smaller scale at Deotamura, near Amarpur. Elsewhere we have argued that the transition from the dominant Eastern Indian style to a distinct ethnically conditioned art-form had something to do with the migration of Tripuri community from the Barak plain to the hilly tracts of Tripura and articulation of their own perception in a permanent medium. Admittedly, the hypothesis cannot be worked out in all its details at this stage of historical research. But the historical process resulting in such a change remains a valid point of enquiry in any study of the art activities in South-Eastern Bengal.

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MARITIME TRADE AND VOYAGES IN ANCIENT BENGAL

Ranabir Chakravarti

A. Prolongue:

A relatively new area in Indian historical studies is the maritime history of India or more precisely India's role in the maritime activities in the Indian Ocean. With the focus of power gradually shifting from Europe since the 1940s the Eurocentric view of history has slowly taken a backseat. The emergence of new nations in the 'Third World', following decolonization, has immensely encouraged scholars to appreciate the role of non-Europeans in the historical developments of these countries including the Indo-Pak subcontinent. In view of the location of a very large number of these new nations in Asia and Africa, it has been also recognised that the sea or seas in this region can be considered as a major point or factor of unity among nations of Asia and Africa. This has given a great fillip to the study of the Indian Ocean which in terms of activities of the people of Asia and Africa has been of tremendous significance. It is doubtless that the Indian Ocean dominates the seaface of Asia. One may in fact say, following Franz Broeze, that a long-term perspective - for instance over the last two millennia - would project Asia and not Europe as the leading maritime continent of the world.¹ Such a perspective would naturally highlight the significance of the Indian Ocean in the maritime history of the pre-modern world.

The geographical area of the maritime space called the Indian Ocean has to be defined at this juncture. The map of the Indian Ocean, published by the National Atlas and Thematic Mapping Organisation, places it upto the Cape of Good Hope in the west, to the Antarctica in the south, includes the Red Sea, the Persian Gulf, the Arabian Sea and the Bay of Bengal in it, but leaves out the Java and the China Seas.² A proper appreciation of the geography of the Indian Ocean is crucial in this context as it holds an important key to our understanding of the movement of people and cultural contacts across this maritime space. The distance of over 10,000 Kms. from South Africa to South Australia certainly impresses upon us the vastness of the Indian Ocean. But it actually extends over only a fifth of the world's total maritime surface, a fact that would on the other hand point to the relative smallness of this ocean. One cannot also lose sight of the fact that this relatively small maritime space connects no less than thirty seven countries, where inhabit a third of the world's population. This sheer numerical fact endows the Indian Ocean with a special status. The "relative smallness, which facilitates communications, explains, why the Indian Ocean has been, more than any other ocean, the vehicle of the most varied human contacts, with very rich consequences".³

The other inescapable geographical fact is the more or less central position of the Indian subcontinent (including Sri Lanka) among countries of the Indian Ocean. The two long coast lines of India, washed by the Arabian Sea and the Bay of Bengal on the west and the east respectively, jut out into the Indian Ocean and provide ample scope of maritime contacts along the two coasts and also with countries overseas. This has considerably encouraged maritime historians to take a close look at India and the Indian Ocean.⁴ Two types of thrusts of maritime historical studies of India can broadly be identified: (a) the situation from 1500 to 1800 with the help of varied types of European documents and (b) the relatively greater attention to the west coast of India than to the eastern seaboard. While the gradual and growing supremacy of Europeans in the Indian Ocean from the 16th century onwards (mainly by 'guns and sails') is unmistakable, the ethos of sea-faring traditions in Indian Ocean countries and particularly in India must be given its due recognition and importance.

B. Scope and Methods:

It will be impossible to divorce the research in early seafaring in the Bengal coast from the broader understanding of the Indian Ocean studies, with particular emphasis on India and the Indian Ocean. The maritime historian of India and the Indian Ocean appears to have been largely inspired by the seminal researches of Fernand Braudel on the Mediterranean Sea.⁵ The study of maritime history does not merely involve a particular sea or ocean, but also integrate the understanding of the connected land with that of the given sea. "Its (i.e. the sea) history can no more be separated", writes Braudel, "from that of the lands surrounding it than the clay can be separated from the hands of the potter who shapes it."⁶ The maritime historian of India, taking this cue from Braudel, looks at the Indian Ocean or part(s) thereof not from the point of view of naval battles and tactics or from nationalistic stance, but urges upon the overall unity between the land and the sea. This is also the approach followed in the present study of sea faring in the Bengal coast upto seventh century A.D.

It must be clearly pointed out that there was no Bengal as such in ancient times. Ancient Bengal, for the sake of convenience, may be taken to denote the areas embracing modern West Bengal in India and Bangladesh. This area in ancient days included in its four major sub-regions; (i) Pundravardhana (north Bengal, Rajshahi, Bogura, Dinajpur areas), (ii) Radha (areas to the west of the present Bhagirathi); (iii) Vanga (traditionally located in the central deltaic Bengal, i.e. Dacca, Vikrampur, Faridpur areas of present Bangladesh) and (iv) Samatata (areas to the east of the Meghna covering Noakhali, Comilla and Chittagong of Bangladesh).⁷ As the littorals of ancient Bengal were included in Vanga and Samatata, greater attention will be paid to these two regions. Our understanding of Vanga - both

geographical and historical - has undergone considerable changes as a result of the discovery of new evidence. A more elaborate discussions on the region Vanga will be made in a following section.

A major hindrance to the researchers in the maritime history of India, particularly during the pre-1500 days, has been the acute shortage of evidence. The well-known trade between the Indian subcontinent and Roman Empire during the early centuries of the Christian era probably resulted in references to sea-borne trade with India in Cassical texts, which are of immense value for our purpose. The evidence of early Chinese texts, though far from being adequate, may also throw some interesting light on the topic of discussion. But the non-indigenous sources of information can at best provide only a rudimentary knowledge of the Bengal littorals, the adjacent maritime space and the life of the coastal communities. The vast and voluminous indigenous literature, both Sanskrit and non-Sanskritic, occasionally refers to the sea and maritime activities. But these mostly appear in stereotyped poetical manner and rarely enlighten us on sea-faring in a matter of fact way. Moreover, the validity of theoretical treatises on shipping and ship-building technologies like the *Yuktikalpataru* of Bhoja-widely used by pioneering researchers in this field⁸-has also recently been questioned. This problem of the paucity of data is to some extent offset by the discovery of archaeological materials, mainly from various coastal sites in India, through explorations and excavations.⁹ One of the most dependable archaeological sources is inscriptions which contain occasional passing-but significant-references to shipping and shipbuilding etc. In this context mention must be made of the large number of seals and sealings found from south-western parts of West Bengal. B.N. Mukherjee's startling identification and decipherment of the Brahmi-Kharosti script, that appears on most of these seals and sealings, has broken fresh grounds in the study of the maritime history of the Bengal coast. Palaeographically assignable to the first four or five centuries of the Christian era, these seals and sealings (of private individuals, and also of official and semi-official nature) are inseparably associated with the material and cultural life of the people of ancient Vanga.¹⁰ In fact this essay attempts for the first time to use these seals and sealings to reconstruct the history of the early sea-faring in the Bay of Bengal. Thus a judicious juxtaposition of literary, field-archaeological, epigraphic and numismatic data may provide us with valuable information- though very much fragmented and partial- for the study of sea-faring in ancient Bengal. The data, available from the sources stated above, are also essentially impressionistic and rarely offer any reliable statistical information. The importance of the maritime affairs in the Bengal coast cannot be properly appreciated in isolation, i.e. by focussing solely on the Bengal coast, but by situating it in the general background of India and the Indian Ocean and more particularly in relation to the eastern sea-board.

C. The maritime space:

The primary unit of the maritime space in the context of the present study is obviously the Bay of Bengal. The significance of the Bay of Bengal, the most important segment of the eastern Indian Ocean, in the Indian Ocean studies has been given a belated and gradual recognition.¹¹ A few words about the early name(s) of this Bay may not be irrelevant here. B.N. Mukherjee has recently drawn our attention to a statement of Pliny (death in c. 79 A.D.) who appears to have been the first to designate the term Indian Ocean (*mari Indicum*).¹² "Here begins the Indian race, bordering not only on the eastern sea, but on the southern also, which we have designated the Indian Ocean".¹³ As Pliny differentiated the southern sea (equated by him as *mari Indicum*) from the eastern sea (i.e. the Arabian Sea) his definition of the Indian Ocean is not the same as that of the Indian Ocean nowadays. While Pliny makes no explicit reference to the eastern sector of the Indian Ocean, the first clear connotation of this maritime space was given by Claudius Ptolemy in his *Geographike Huphegesis* (around the middle of the second century A.D.) under the name of 'Gangetic Gulf'.¹⁴ This is obviously the same as the Bay of Bengal. But the Classical authors in general make few, if any, observations about the Bay of Bengal, as the shippers and sailors from the 'West' had much closer contacts with the western segment of the Indian Ocean than with its eastern sector. Indigenous literary texts also leave for us two blanket terms: *purva* (eastern) and *pascima* (western) *samudra / jaladhi* (sea), referring respectively to the Bay of Bengal and the Arabian Sea. Interestingly enough, an inscription of the Candara dynasty of south eastern Bengal, dated 971 A.D. mentions *Vangasagara*.¹⁵ This is nothing but the *sagara* or sea of Vanga and hence may safely be assumed as the base of the later coining of the term Bay of Bengal. The term Vangasagara in the Bengal inscription may closely correspond to the expression *bahr Harkand* or the sea of Harkand/Harkal (=Harikela, south-easternmost Bengal), found in several Arab texts of early medieval times and notably in the *Hudud al Alam* of 982 A.D.¹⁶ In fact *bahr Harkand / Harkal* stands for the eastern sea of India and therefore may easily be equated with the present Bay of Bengal.

D. The Coast:

One of the salient features of the geography of the subcontinent is the two long coast lines washed respectively by the Arabian Sea and the Bay of Bengal. The basic difference between the two littorals is to be seen in the presence of several deltas in the eastern sea-board, while in the west coast no other river except the Indus has a delta.¹⁷ Of the deltas in the east coast, the most important is the Bengal or Gangetic delta, which is the largest delta in the world. Geographers find three

distinct categories within this delta: (i) the moribund delta—covering Nadia, Murshidabad and north 24-Parganas districts in West Bengal and Jessore and Khulna areas in Bangladesh; (ii) Mature delta — parts of 24-Parganas district and Khulna, and (iii) active delta in the marshy lands eastward of Calcutta, the Sunderbans and between the Madhumati and the Meghna.¹⁸ The importance of innumerable rivers— both tributaries to and branches of the Ganga— in this deltaic region can hardly be over-estimated in terms of inland riverine communication which provide the vital linkage between the coast and the interior. The study of the history of navigation in the Bengal coast therefore does not remain confined to the littorals only, but has to take into serious consideration the situation in the interior in the light of its contacts with the coast and the maritime space.

The coast in question and the Bengal delta in broader terms comes to prominence in the history of sea-faring in the Indian Ocean from the first century A.D. onwards. The *Periplus of the Erythrean Sea* informs us: "After this (i.e. the country of Dosarene located in the Kalinga coast) ... you reach the Ganges region and in its vicinity the furthest part of the mainland towards the east, Chryse. There is a river near it that is itself called the Ganges, the greatest of all rivers in India. On it is a port of trade with the same as the river Ganges".¹⁹ The *Periplus* doubtless speaks of the Ganga delta, and particularly the lower Bengal area. The country and the principal port there of have been named after the most important river flowing through it. Claudius Ptolemy in the middle of the second century A.D. was also aware of the same port which he located in the country of the Gangaridai.²⁰ Thus like the anonymous author of the *Periplus* Ptolemy also named the country after the Ganges and located it in more or less the same region. Juxtaposing the Classical textual evidence with the Chinese literary materials, B.N.Mukherjee shows that (1) in the early centuries of the Christian era, a part of deltaic Bengal was named after the Ganga and (2) that the Chinese equated the Ganga country with Vanga.

The combined testimony of the Chinese and the Classical accounts and the historical geography and early cartography of deltaic Bengal led B.N.Mukherjee to suggest the following limits of Vanga in the first four or five centuries of the Christian era. "It should have included the area, now in the 24 Parganas (North and South), Hooghly, Howrah, Midnapore and parts of Burdwan (and also Birbhum, Bankura and Nadia?)".²¹ These areas have also yielded major early historical archaeological sites. More significantly, a handsome number of documents inscribed in Kharosti and /or Kharosti-Brahmi (mixed script) have recently been found from what was ancient Vanga or the Ganges country.²² The area which came into limelight in the first four or five centuries A.D., is located within present

West Bengal. The coastal area of Bangladesh or areas adjacent to the littoral, though initially less prominent, attained considerable importance from 5th–6th centuries onwards.

E. Products:

As the navigational activities in the Bengal coast during the ancient times are studied to understand the life and conditions of communities in and around the coast, there will be a socio-economic thrust in this survey. Relevant to such an orientation will be an understanding of the products and nature of products which were available and transacted.

It is only natural that a region such as the one under discussion here was very much suited to agricultural activities as ancient Bengal was both a *devamatra* (endowed with profuse rainfall) and a *nadimatra* (watered with rivers) country. The irrefutable proof of a flourishing agrarian economy in the Bengal coast is furnished by a number of Kharosti and Kharosti-Brahmi inscriptions. Several seals/seal-impressions bear stylized depictions of stalks of grain often emerging out of a vessel.²³ The most important crop was of course paddy (*dhanya*) which was shown on a seal from Hadipur.²⁴ A *yaksi* called Jirambi (i.e. a spirit protecting *jira* or cumin-seed) figures on another terracotta object from Chandraketugarh,²⁵ indicating thereby the possibility of the cultivation of cumin-seed. A vessel from Hadipur contains a Kharosti inscription which labels the said vessel as *Vapayakosa*,²⁶ i.e. a vessel for a sower. Such vessels must have contained a specific amount of seed of a particular grain to be sown on a given amount of land. A seal impression from Bangarh not only depicts stalks of grain but also the vessel containing grain. The vessel is categorically described as one for containing grain (*sasyadi-dhrtasthalī*).²⁷ Another terracotta seal from Chandraketugarh informs us of a *kodihalika*, an epithet to designate a person possessing a crore of (actually many) ploughs.²⁸ Another person Yasa is described as rich as a Yaksha in grain (*sasye yaksasya*).²⁹ The last two pieces of evidence are clear pointer to the presence of very rich agriculturists. In this context it must be mentioned that many terracotta seal/sealings discovered from lower Bengal also speak of transportation of grains by maritime voyages. The destinations of such voyages are not known. This is a point which would be taken up for more elaborate discussion in a subsequent section. But such data leave little room for doubt that grains—especially paddy—were grown in large amount which paved the way for the transportation of a part of the produce by overseas voyages.³⁰ That the coastal areas of Bengal continued to be agriculturally prosperous in the first half of the seventh century is amply demonstrated by Hsuan Tsang (travels in India from 629 to 645 A.D.). The pilgrim was considerably

There is a distinct possibility of this being a Scythian cap and its user a northwesterner of non-Indian origin. One is tempted to suggest that he is a horse-dealer though this cannot be readily proved.³⁶ The seal is an irrefutable proof of transaction in horses in early Bengal, more so, because a seal of this type has to be associated with the process of authentication of a transaction. It also provides the earliest evidence of the shipment of horses from an Indian harbour.

But the horse is not native of Bengal. In fact, the horse and especially good quality war horse, was always a rarity in India and had to be regularly imported into India from the north-western borderland of the subcontinent.³⁷ The availability of horses in Bengal can therefore be explained as an import from the north-west to the deltaic Bengal through the Ganga valley. But where was the horse sent by maritime trade, as is clearly evident from the Chandraketurah seal impression? An answer to this has been provided by B.N. Mukherjee on the basis of the Chinese account of Kang-tai (249-50 A.D.) who informs us that the Yueh-chih merchants are continually importing them (horse) to the Ko-ying country by sea".³⁸ While the Yueh-chih traders were either Kusana merchants and /or dealers in the vast Kusana realm,³⁹ Ko-ying is located in Malay Peninsula. Kang-tai thus clearly mentions about overseas voyages to S.E. Asia to transport horses from Indian mainland. Attention has also been drawn to a copper drum (found in the island of Sangeang in S.E. Asia) which has an engraved scene depicting two men in typical Yueh-chih dresses along with a horse. The availability of Kharosti/Kharostī-Brahmi documents in Bengal and also in Oc-éo (Vietnam) and U-thong (Central Thailand, the document is now in the Lopburi Museum, Thailand) would strongly emphasise upon contacts between the Bengal littorals and South-east Asia. Such contacts must have been maritime in nature and can logically be associated with the transportation of horses to Southeast Asia.⁴⁰ The horse also had a regular demand in far South India, as is evident from the Sangam texts.⁴¹ As the horse is now known to have been sent overseas from Bengal by the *trappaga* type of ship, which in all probability was used in coastal voyages, the horse could have been shipped from a Bengal port to ancient Tamilakam by a coastal voyage.

The products involved in the maritime voyages of Bengal were therefore grains, textile products, spices of diverse types and horses. Of these the 'Gangetic' muslin, spices and horses must have been extremely precious commodities. The transaction in grain speaks of trade in an essential commodity by sea-borne voyages, though the volume of this trade cannot be ascertained. While grains and muslins were exported as local products of Bengal, the horse appears to have been shipped to South-east Asia as an item of transit trade, after the demand for the horse was met in Indian mainland.

F. Water Transport (Ships) and Shipping :

One of the core themes of maritime history is surely the study of the vessels and shipping technologies of the past. In the case of early Indian maritime studies this is a challenging task in view of the extreme paucity of data. Remains of ancient Indian ships and/or boats have so far not been found by archaeologists. The other alternative source has been visuals of vessels depicted in paintings, sculptures, coins and occasionally seals.⁴² Though these representations may not be actual or accurate—since the artist/craftsmen, if himself not a sailor, may not depict different components of the vessel in proper way or order—they provide more concrete data regarding early Indian ships than the stereotypical textual descriptions in literary works and sastric treatises.

In this context the Kharosti/Kharosti—Brahmi seals, recently deciphered, hold a crucial clue. As the seals are doubtless integrated with trade, the information supplied by them has a direct bearing on transaction of commodities. Significantly enough some of these seals/sealings/seal impressions bear figures of water transport. Inscriptions engraved on these seals throw further light on these vessels. The data available are expected to break many new grounds in the maritime studies of early India.

A terracotta round seal (slightly damaged), found from Berachampa, 24-Parganas district (North), shows a boat with a mast placed near the fore-end or bow which is marked by a projected prow. The single mast appears to have been fitted with a banner. The stern shows an oar, the longer portion of which is below the boat and the shorter portion is projected up on board. The Kharosti-Brahmi inscription reads *Bhajotha dijri (or jri) ssudhoradho* (= *Bhajatha dvijesu udadhau*) meaning, "you take resort into the Brahmins (while) at sea".⁴³ The inscribed label may suggest that it could have been used in sea-voyages, though it may not have been meant for high-sea journeys.

Next comes the seal impression from Chandraketugarh showing a ship and a horse on it (already mentioned above). The legend in Kharosti-Brahmi script reads, "*Tasvodajana Hovaji (no) na Trapyagasa*" which means, according to B.N. Mukherjee, "of [the ship of the class of] Trapyaka belonging to (i.e. owned by) the power conquering (i.e. powerful) Tasvodaja family".⁴⁴ (fig.2) The craft therefore is labelled *trapyaka*. This immediately reminds us of a class of ship named *trappaga* mentioned in the *Periplus of the Erythrean Sea* (first century A.D.). The *Periplus* leaves behind the account of *trappaga* in the context of the description of Barygaza (Bhrgukaccha or Broach), the celebrated port on the western sea board. According to the *Periplus*, *trappagas* along with the *kottymba* class of vessels were employed by king Nambanus (= Saka Ksatrapa

Nahapana) to pilot foreign ships to Barygaza, since the passage of entrance to this harbour was extremely difficult to negotiate. Trappagab used to go "as far as Syrastrène to meet vessels and guide them upto Barygaza".⁴⁵ Syrastrène probably stands for Saurashtra on the southern part of the Kathiawad peninsula. The trappaga was therefore a type of craft meant for coastal voyages. Their journeys between the South Kathiawar peninsula and the mouth of the Namados (=the Narmada) on which stood Barygaza indicate their ability to undertake long voyage *along the coast* (italics mine). The trappaga under a slightly variant name *tappaka* also figures in the *Angavijja*, a Jaina text of the fourth century A.D., but possibly relating to earlier traditions. The *tappaka* along with the *Kottimba* (cf. Kottymba of the *Periplus*) and *samghada* is classified in this text as a vessel of the middle variety, higher than crafts like *kattha* and *velu*. The *trappaka* and other crafts of the 'middle category' are further differentiated from the *pota* or larger (suitable for high-sea voyages?) ships which are described as having greater space (*mahavakasa*).⁴⁶

All these help us identify 'trapyaka' of our seal with the nearly homonymous crafts mentioned in the *Periplus* and the *Angavijja*. The trappaga/trapyaka therefore must have been in operation not only in the west coast or parts thereof, but also in the eastern sea-board and the deltaic areas of ancient Vanga. The *trapyaka*, besides piloting vessels from abroad to an Indian port, seems to have been in operation for transportation of commodities including as precious an item as the horse. The seal in question gives us for the first time some clues about how the trappaga/trapyaka could have looked like. The left half of the hull is longer, raised to a considerable height and also probably pointed at the end. One can also notice at least three vertical and parallel bands between the port and starboard sides of the vessel. This may be an attempt at showing beams of the ship; the beams are extremely important for fastening throughout the vessel. At the centre of the vessel stands a single mast with a tripod⁴⁷ base and the stylized figure of a flag atop. Near the top of the mast may be seen a rectangular object from which a pair of parallel ropes come down on each side of the mast. These may be tentatively suggested as the ship's stays, though no sail is clearly visible. From the lower half of the mast (on the left hand side) an object projects out horizontally; a rope hangs down from it; at the end of the rope is a oval shaped thing which appears to have been lowered down below the ship. The oval shaped object appears to have been an anchor. B.N.Mukherjee draws our attention to a gap between the letters *ji* and *na* (see the field near lower rim of the seal on the right hand side). According to him the space between the two letters is filled up by a rope at the end of which is another anchor.⁴⁸ There might have been two anchors,⁴⁹ indicating the ship's stationery position, probably at a port.

The third specimen comes from Chandraketugarh, once again. The round terracotta seal impression bears the figure of a craft having a single mast (with a flag atop) in the foredeck. Beams are also shown, though crudely. The bow and stern are both curved upwards; an oar is fitted to the raised stern. As the boat is shown in profile, there could have been another oar (not depicted in the sealing on the other side). The Kharostibrahmi mixed script reads *Jemdhas' jujusya* (= *Jayanta-Shahi-Jujoh*) i.e. "of Juja, the conquering king".⁵⁰ The identity of this ruler cannot be established at the present state of our knowledge. But this ship is surely a royal one. It would be therefore logical to infer considerable interests of a ruler(s) in maintaining his own fleet for commercial purposes. A few *Jataka* stories indicate that members of royal families took interests and initiatives in maritime voyages for trade to distant countries, including Suvarnabhumi.⁵¹ The seal in question furnishes the earliest definite knowledge of a 'royal ship' in India.

Chandraketugarh also yields another terracotta (nearly round) seal impression (D.A. WB. CKG.184). The bow and stern of the vessel are both curved upwards; the stern is fitted with an oar. Beams are clearly shown on the relief. A tripod mast is erected at the foredeck and a banner is flying at the top of the mast. About the three-quarter height of the mast is a rectangular object with four holes, two on each side of the mast.⁵² It is difficult to identify this object. But D.Schlingloff finds on a Satavahana 'ship type' coin the figure of a ship with two masts and a thick wad visible at the mast-head.⁵³ Though the ship on the Bengal seal and that on the Satavahana coin are not identical, the rectangular object near the mast-head of the first one could have been, following Schlingloff, the representation of a furled sail. The terracotta seal also has a Kharostibrahmi legend (palaeographically of the third century A.D.), reading *Jidhatradhana Jusatrasa tridesojatra*. This means, according to B.N. Mukherjee, "the journey to (or in) three directions of (i.e. by) Yasoda who has earned food-wealth" (i.e. whose wealth is earned by selling food). [*Jitatrathana-Yasodasya tridesa-yatra*.]⁵⁴ Yasoda therefore must have amassed wealth by transporting grains on ship (i.e. food) to 'three directions' i.e. to distant destinations. This will be further supplemented by the representation of a stylized stalk of grain in the right hand field of the seal. The message is unmistakable: the product or the principal product the ship carried was depicted on the seal, which is primarily a trade document.

A nearly similar scene is depicted on another terracotta seal (nearly round) found from Chandraketugarh and now in the collection of the Indian Museum, Calcutta (IM. 90/181). The seal impression shows the figure of a ship with a single mast on the foredeck and clear representations of beams. At the centre is depicted a rather disproportionately large

basked from which stylized stalks of grain come out. This impresses upon the fact that the ship carried grains. This is further supplemented by the accompanying Kharosti-Brahmi inscription : "*Soridhajasa Dijammasa Jaladhisakla* (= *Surddhayasa Dvijanmasya Jaladhisakrā*)".⁵⁵ This has been translated as "[the ship called] Jaladhisakra (i.e. Indra of the Ocean) of [i.e. belonging to] Dvijanma who is famous as wealthy".⁵⁶ The stern is fitted with a steering mechanism which does not resemble an oar, seen on other representations of ships on the Bengal seals. The steering mechanism is represented by a vertical straight line which is crossed at the centre by another long horizontal line. One is not sure, but could this have been a steering oar fitted with a horizontal handle to control the movement of the ship?

A few more comments on the last two types of ships may be made at this juncture. The first was capable of undertaking *tridesayatra*, i. e. distant voyages; the second, being named Indra of the Ocean (*jaladhisakrā*), must have also been fit for overseas voyages. They stand apart from the category of coastal vessels in the Bengal littorals, e.g. the *trappaga/trapyaka* in another seal from Chandraketugarh. Thus the Bengal sea-board had both coastal and high-sea vessels. Interestingly enough, both the high-sea ships are found to have been used for transportation of grain. Can they be equated with the *mahavakasa* type of large ships mentioned in the *Angavijja*?

Some more indications of the maritime transportations are available from coins found at Chandraketugarh. Three punchmarked billon coins depict (on the left hand field of coins) single-masted ships.⁵⁷ The mast is located on the foredeck, while the stern is raised high and straight. An elongated object attached to the stern could have meant a pole used as a steering mechanism. Attempts have been made to depict beams of these vessels by the use of two or three parallel horizontal strokes on the top of the hulls of these vessels. Another punch marked billon coin,⁵⁸ once again from Chandraketugarh, shows a vessel with a cabin, represented by two parallel horizontal lines, topped by a long vertical line. This is unique in the representation of vessels in early Bengal. The stern is raised high (but not straight), giving the vessel the shape of crescent. On the top right of the stern may be seen portion of a pole to steer the vessel. The absence of the depiction of an oar on these vessels may suggest that they were not used in sea-voyages, but plied on riverine routes.

Among early literary texts the *Arthasastra* throws some lights on shipping. Laying down the ideal functions of the *Navadhyaksa* (Director of Shipping),⁵⁹ the *Arthasastra* uses a generic term *nau / nauka* to denote a water craft. Sea-voyages apparently did not find enough attention of

the thinker who mainly dealt with riverine traffic, largely from the point of view of revenue collection. The *Arthasastra* however distinguishes the *mahanau* (large craft) from a small one (*ksudrika*). The former was employed on large rivers (*mahanadisū*) having enough water even during the summer and autumn (*hemantagrīśma-taryasū*); the *Ksudrika* was to ply on rivers fordable only during the monsoons (*ksudrikasū varṣāstravinisū*).⁶⁰ The *Arthasastra* is more explicit on the components and crew of the larger vessel (*mahanau*). These are *sasaka* (captain) *niryamaka* (or *niyamaka*?) i.e. the navigator; *rasmigrahaka* (holder of the string, i.e. one who controlled riggings by pulling or adjusting the ropes attached to the mast is it possible to infer that ropes had to be pulled or released to manoeuvre the sail(s)?); *datragrahaka* (the sickle-holder; i.e. the crew who would cut the ropes with a sickle during a storm) and *utsecaka* (one who bailed out water from the hold of the craft).⁶¹

More elaborate information is available in the *Amarakosa* of Amarasimha, assignable to the 5th/6th centuries A.D.⁶² Various terms are found to designate different categories of crafts. While rafts are called *udupa*, boats are known by several synonyms: *nau*, *tarani*, *tari* and *droni*. The term *pota* may stand for a larger vessel or ship. A *potavanik* or merchant vessel⁶³ carried passengers (*samyatrika*). The mast was known as *gunavriksa* or *kupaka* and the oar was called *aritra*.⁶⁴ The term *naukadanda* may denote a rod or a log to assess the depth of water for safe navigation of the ship. The *sekapatra* must have been a container or bucket to bail out water seeping into the 'hold' of the ship. Among the crew of the *pota*, the *navika* (navigator/sailor), *niyamaka* (pilot) and *karnadhara* (operator of the *karna* or the steering oar or rudder).⁶⁵ It may not be out of place here to refer to *mahanavika* Buddhagupta of Raktamrttika who figures in a fifth century fragmentary stone inscription found from the Malay peninsula.⁶⁶ The term *mahanavika* may mean a senior or leading mariner or may also be interpreted, following D.C. Sircar, as "captain of a *mahanau*"⁶⁷ (large ship). Raktamrttika, wherefrom Buddhagupta hailed (*Raktamrttikavasa*), must have been the same as Rangamati (12 miles south of Murshidabad, West Bengal). Raktamrttika was situated close by Karnasuvarna, the capital of the famous Gauda king Sasanka (c. 600-37 A.D.), as will be evident from the accounts of Hsuan Tsang and the archaeological excavations carried out there.⁶⁸ This leaves little room for doubt about the overseas shipping between the Bengal littorals and the Malay peninsula.

It is difficult to present a definitive account of the ship building technology in ancient Bengal. Like pre-modern ships of India and Asia, ships of Bengal must have been made of wood and without the application of iron nails. Ancient crafts in general evolved from the dug-out canoe. On each side of the keel wooden planks were raised to form the hull.

The planks were fastened together generally by stitching them with ropes, usually made of coconut coir. Such type of vessels are known to have been built by the 'sewn-plank' technique. The so-called sewn boats have widespread distribution over the Red Sea, the Persian Gulf and the rest of the Indian Ocean also.⁶⁹ Schlingloff on the basis of early depictions of boats and ships from Sanchi and Bharhut suggests that "planks are secured with wooden dowells and not cord".⁷⁰ He further cites the instance of an ancient Malayan river boat (assigned to the second half of the 1st millennium A.D.) which had both cords and wooden dowells.⁷¹

A remarkable feature of shipping in the Indian Ocean during the pre-modern period is the influence of the monsoon winds on the movement of the ship. The more or less regular and hence predictable movement of two monsoon winds in alternate directions (June-September: south-west monsoon; October/November-March/April: North-east monsoon) must have deeply influenced overseas shipping. The knowledge of the monsoon winds appears to have been possessed by ancient Indian mariners. But the increasingly intelligent and more developed utilisation of the wind-system can definitely be seen from the late first century A.D. This is the time when the Indo-Roman sea-borne trade was at its zenith.⁷² The south-west monsoon, known as Etasian or Hippalus wind, was regularly used by western mariners to reach the western littorals of India from the Red Sea ports. The same wind system could be used by ship sailing in the Bay of Bengal, voyaging from the Coromandel or the Andhra coast, to the Orissa or Bengal coast or south-east Asia. Ptolemy speaks of an *aphaterion* in the Andhra coast or departure point of ship bound for Chryse Chora/Chryse Chersonesis (i.e. Suvarnabhumi or Suvarnadvipa).⁷³ The voyage from the Bengal coast to South Indian littorals and/or South-East Asia must have been made with the onset on the reverse monsoon (i.e. north-east monsoon). This is strikingly confirmed by Fa-hsien's return sea-voyage to China. Fa-hsien started his journey from the port of Tamralipaa (in present Midnapur district), the famous international harbour in the Bengal littoral. "He embarked in a large merchant-vessel and went floating over the sea to the south-west. It was the beginning of winter, and the wind was favourable; and after fourteen days, sailing by day and night, they came to the country of Singhala (i.e. Sri Lanka). The people said that it was distant (from Tamralipti) about 700 *yojanas*."⁷⁴ Thus the sea-voyage from Tamralipta to Sri Lanka was undertaken during the time of north-eastern monsoon. On the other hand the journey which brought I-tsing (673-695 A.D.) from Malay to Tamralipti⁷⁵ must have been made during the southern monsoon.

G. Ports :

A discussion on sea-voyages may logically be followed by one on ports and harbours. It must be stated that ancient ports were rarely on

the open roadstead or sea and largely situated in the estuary of a river in the delta of a river. This is also true for the eastern sea-board, including the Bengal littorals. The eastern coast is less indented than the western sea-board which consequently is better endowed with natural harbours.⁷⁶

Names of harbours of ancient Bengal are only a few. It is also extremely difficult to suggest their exact locations in antiquity, as the hydrography of Bengal has undergone considerable changes in ancient and modern times. The identification and fixing the location of ports of ancient Bengal has been a subject of keen controversy among scholars.

An early port mentioned in the Classical sources is Gange, so named because of being situated in the Ganges country, certainly named after the river Ganga.⁷⁷ Gange is also mentioned by Ptolemy as a mart.⁷⁸ It may be located at or near Deganga in 24-Parganas (North) district,⁷⁹ through which flowed the Jamuna, a branch of the Gangas which ultimately emptied itself of the Bay of Bengal.

The representations of ships/boats on terracotta seals/seal impressions found from Chandraketugarh, strongly suggest that it was a major port of early historical Vanga. Situated on the banks of the Vidyadhari river, Chandraketugarh a famous archaeological site, may safely be designated as a riverine port having facilities of both coastal and long-distance high-sea voyages. Enormously rich in surface finds, Chandraketugarh covers an area of 3 square miles. Excavations conducted here from 1956-57 to 1967-68 show a continuous sequence from pre-Maurya to Pala times, divided into six periods. Material evidence of transaction may be inferred from the discovery of NBPW and copper punch marked coins from the Maurya level. The next phase (designated late Sunga) has yielded, among other things, cast copper coins. Numerous terracotta figurines of great beauty and charm, model toy cart drawn by various animals, beads and coins are among the notable antiquities discovered from this site.⁸⁰ This riverine port is known only from archaeological materials, though attempts have been made to equate it with the Gange port of the *Periplus*.

The port par excellence in this area was Tamralipta, generally equated with Tamruk (in Midnapur district), situated on the right bank of the Rupnarayan. It is probably the same as Tamalites of Ptolemy and Taluctae of Pliny.⁸¹ P.C. Dasgupta finds no less than fifteen textual references to Tamralipta in ancient literary texts.⁸² It was at its height when Fa-hsien and Hsuan Tsang visited Tamralipta respectively in the fifth and seventh centuries A.D. While Fa-Hsien left India from this port for Sri Lanka, Hsuan Tsang was highly impressed by the availability of precious items at this port. The international maritime contacts of Tamralipta will further be

evident from the disembarkation of Itsing at this port from Malay peninsula. The very epithet *velakula* affixed to Tamralipta (variously called Damalipta, Tamralipi, Tamraliptika etc.)⁸³ clearly shows it to be a port. Excavations carried out at Tamluk in 1954-55 indicate that the site was under occupation from the neolithic to modern times. The 'Maurya-Sunga phase' (Period II) has yielded NBPW and black slipped ware, red-ware, terracotta figurines with cast copper coins of "pre-Christian times". Period III (1st-2nd centuries A.D.) witnessed the advent of rouletted ware and red-polished ware, which are indicative of long-distance, if not foreign contacts. A brick-built stepped tank and ringed soak-well throw lights on the structural activities in this phase. Period IV (Kusana + Gupta) is marked by terracotta figurines; urban scenes are depicted on terracotta plaques found from this phase which has also yielded coins and semi-precious beads.⁸⁴

It must be pointed out that the excavated materials are not impressive enough to match the literary data that highlight the prosperous and brisk trade carried at this port. Surface finds from Tamluk and neighbouring areas (within the present Tanmluk-subdivision)— now in the collection of Tamluk museum and other private owners and agencies— are quite impressive, but the provenance of these objects are not always recorded correctly.

Recent archaeological explorations in the coastal areas of the Midnapur district amply bear out that there are a number of early historical sites not far away from Tamluk, e.g. Bahiri, Tikasi, Tilda, Panna, Amritberia, Natshal, Badur, Nandigram, Latpatia etc. Of these Bahiri, Tikasi and Tilda deserve special mention.

Sites like Bahiri, Tilda and Tikasi may indicate that these were in ancient times connected with riverine and ultimately the seaborne trade of south-western Bengal. By no means these can be compared with Tamralipta. But their riverine contacts and ultimate access to the sea may underline their significance as smaller ports which could have acted as supporting or feeder ports for a much larger harbour nearby like Tamralipta.⁸⁵

It is hardly surprising that Tamralipta practically over-shadowed these smaller harbours. But there were other ports which were less prominent than Tamralipta but certainly played a role in the maritime tradition of Bengal. A study of available Chinese evidence strongly suggests that around seventh century Samatata area (Noakhali-Comilla region in Bangladesh) gradually began to emerge as point of contact for coastal as well as long-distance voyages in the Bay of Bengal. Only few names survive among ancient harbours of Samatata. One, however, is known from epigraphic source. This is Devaparvata, identified with Mainamati-

Lalmi in Comilla. The earliest epigraphic evidence of Devaparvata is furnished by the Kailan C.P. of Sridharanarata (c. 665-75 A.D.).⁸⁶ Devaparvata is described to have been encircled by the river Ksiroda (i.e. modern Khira/Khirnai), both banks of which were decorated by boats and in which elephants bathed. Devaparvata is also given the epithet *sarvatobhadra*, meaning that it was approachable from all four sides (by river?) or it had gates on all four sides (*atha mattamatanga-satasukhavigahyamano vividha tirthya naubhiraparimitabhiruparacitakulaya pariksitad-abhimatanimnagaminya Ksirodaya sarvvatobhadrakad-Devaparvvata*). This unmistakably shows Devaparvatga to be a riverine port in Samatata, not far away from the Bay of Bengal. Around Devaparvata were also three *naudandakas* or boat parking stations. The inscriptions in question also mentions a *villabhanga* (cf. the Bengali work *Bil*, moss covered with water) which was associated with *niskranta pravistaka* (facilities for entry and exit of vessels?).⁸⁷

H. Routes of Maritime contact: hinterland-foreland :

A port does not stand in isolation in a given area; its activities are linked up not only with areas inland (often urban and political centres), but also with other harbours in various littorals, far and near. In other words the port must have a regular hinterland inland and a foreland overseas for catering to the needs thereof and also for being supplied with items of trade. Regular routes of contacts, maritime as well as overland, are indispensable for the prosperity of a port.

A glance at the map of north India would immediately show that for the greater part of the Ganga valley—especially the middle Ganga valley—the Bengal delta provided the only outlet to the sea. This clearly impresses upon us the importance of the harbours on the Bengal coast for the 'landlocked' north India. As the littorals in question come into prominence in the late 2nd/1st century B.C. or 1st century A.D., the *Jataka* stories are replete with anecdotes (perhaps stereotypical) of voyages by merchants from Varanasi or Campa (near Bhagalpur) to Suvarnabhumi or Suvarnadvipa.⁸⁸ Such merchants seem to have first undertaken a riverine journey along the Ganga to the Bengal coast, wherefrom a sea-voyage was next made to South-east Asia. The recent discovery of Kharosti documents in ancient Vanga has thrown new lights on the extensive hinterland of coastal Vanga. Kharosti was largely known to have been in use in the northwestern areas of the subcontinent. But of late Kharosti inscriptions are found near Chunar, in the heart of the Ganga valley, and Vanga.⁸⁹ This would clearly suggest overland linkages of north-western India with the middle Ganges valley and finally with the Bengal littorals. This extensive hinterland immensely facilitated the trade in horses from the northwest to Vanga wherefrom a part of this consignment was shipped to south-east Asia.

The information in the Classical source regarding the availability of malabathrum at the port of Gange on the Ganges leads one to infer that the product was brought to Gange from elsewhere and was not a product locally available. B.N. Mukherjee hints at the possible source of malabathrum (*tamala patraltejpata*) in "inter alia Khasi and Jaintia hills".⁹⁰ Seen from this light the hinterland of Gange spread as far north-east as the mountains of Assam. The north-eastern borderland must also have furnished from Thine (China) "silk floss, yarn and cloth" that brought to the river Gange (i.e. obviously to a port on the Ganges) and then shipped to Limyrike or south India.⁹¹

More concrete information is available regarding Tamralipta. The visit to the port in question by Fa-hsien by an overland journey from Campa (in eastern Bihar) highlights the connexion between port and the hinterland for inland. Similarly I'tsing, having disembarked at Tamralipta after his sea-voyage from Malay peninsula, proceeded overland to Magadha via a route which was, according to him, also traversed by large number of merchants. Attention may also be focused on Hsuan Tsang's travels in Bengal. The pilgrim proceeded from Nalanda to Ka-chu-wen-kie-lo (Kajangala near the Rajmahal hills), then to Pun-na-fa-tan-na (Pundravardhana or north Bengal) followed by his journey to Ka-mo-lu-po (Kamarupa in upper Assam) wherefrom he came down to San-mo-ta-ta or Samatata. From Samatata he went to Tan-moh-li-ti or Tamralipta and thence to Kie-la-na-su-fa-la-na or Karnasuvarna (in the present Murshidabad district).⁹² Two coastal areas viz. Samatata and Tamralipta were thus interlinked by overland routes, which also connected the coast with Kamarupa and Radha. Moreover Hsuan Tsang's journey from Karnasuvarna to Orissa must have been undertaken through the present Midnapur district which included in it the port of Tamralipta. Hsuan Tsang also did not fail to observe that "the water and land"⁹³ embraced each other at Tamralipta, impressing upon the reader thereby that at Tamralipta both land and sea-routes converged. This must have been instrumental in bringing the port in question to prosperity and prominence. Tamralipta seems to have declined as an international port in around the eighth century. The last known reference to Tamralipta is furnished by the Dudhpani inscription.⁹⁴ According to this record, three merchant brothers hailing from Ayodhya came to Tamralipta where they earned considerable money by trading. This once again points to the long-distance connexion between the port and the hinterland.

Now to the possible maritime routes of contact. The *Periplus*, as has been already pointed out, clearly shows shipping of merchandise from the port of Ganga to Limyrike, i.e. south India and more precisely the Coromandel coast harbours. Such shippings must have followed the coastal route along the eastern sea-board. Epigraphic records from the coastal Andhra region and dated to the third century A.D. tell us about the

presence of Buddhist monks at Vengi, hailing from many countries, including Vanga.⁹⁵ This once again may suggest coastal contacts between Vanga and Vengi. Archaeological corroboration of this contact is also available. The discovery of rouletted ware at numerous sites all along the eastern sea board has to be duly weighed in: Alagankulam, Kaveripattinam, Nattamedu, Arikamedu, Vasavasamudram, Kanchipuram (in Tamilnadu), Amaravati, Salihundam and other sites in coastal Andhra, Sisupalgarh in Orissa, Tamruk and Chandradetugarh in West Bengal. The discovery of RW should be appreciated from the point of view of a definite pattern of distribution and transaction. The recent reexamination of RW materials at Arikamedu by Vimala Begley leads to revised dates of this ware. The distribution of RW begins from about B.C. 200 and continues upto A.D. 300.⁹⁶ This implies that the RW need not have to be looked at from the point of view of Indo-Roman trade. The RW is suggested to have been a pre-Roman Mediterranean source. All these would firmly establish the coastal network of communication along the entire length of the eastern sea-board. This is an indigenous coastal network system which had its own dynamism and need not been seen from the angle of external contacts. To this may be added the discovery of Kharosti and Kharosti-Brahmi documents not only in ancient Vanga but also from the excavations at Manikpatnam (near Chilka Lake) in coastal Orissa.⁹⁷ This doubtless demonstrates, once again, coastal network between ancient Vanga and Kalinga.

The discovery of Kharosti and Kharosti-Brahmi documents in Thailand and Vietnam adds to the dimension of our knowledge of Vanga's overseas contacts with south-east Asia. It appears that such voyages were initially coastal in character from the delta of the Ganga to that of the Irawaddy or lower Burma and Thailand. The isthmus of Kra provided a suitable and easy overland passage from west to east, whence the Gulf of Siam could then be approached. From the fifth century onwards, Tamralipta's long distance contacts with Sri Lanka and thence to Malay peninsula through the Malacca Strait are well attested by Chinese textual evidence.⁹⁸

Interestingly enough, Hsuan Tsang draws our attention to the commercial activities in Samatata at a time when Tamralipta was already at its zenith. The pilgrim records his impression, albeit faint and inadequate, about the knowledge of six areas which had contacts with Samatata. These are Shi-li-cha-ta-lo (Srikssetra in Burma with its capital at Prome on the Irawaddy), Kia-mo-lang-kia (Kamalanka, identified with Pegu and the Irawaddy delta in Burma). To-lo-po-ti (Dvaravati, the famous Burmese kingdom in Sandowe region), I-shung-na-pu-lo (Isanapura to the east of Dvaravati), Mo-ho-chen-po (Mahacampa in Vietnam and Yen-nio-na-chen (Yamanadvipa, identification uncertain).⁹⁹ There is a clear hint that contacts between Samatata and these regions in South-east Asia had already

started by the first half of the seventh century, probably by maritime voyages. This suggests the gradual emergence of Samatata as a maritime zone of considerable importance.

I. Concluding Remarks :

A few things should be pointed out in this concluding section. Despite the widely-held notion that the Bengal coast had regular contacts with the Roman traders/sailors, it will be well nigh impossible to furnish concrete proof in favour of this hypothesis. The 'emporia' in India as enlisted by Ptolemy indicate settlements of Roman traders/sailors at places in or near the sea-coast under the encouragement of the rulers thereof. The northernmost limit of the distribution of such 'emporia' of Ptolemy along the eastern sea-board is the Andhra coast.¹⁰⁰ The absence of emporia in the Kalinga and Vanga coast cannot but be interpreted that these two littorals had no direct participation in Roman trade.

The importance of the Bengal coast, both in West Bengal and also the Samatata area in Bangladesh, for maritime voyages along the eastern sea-board and also with South-east Asia is enormous. The port par excellence in ancient Bengal was of course Tamralipta. But we have demonstrated above how Samatata was gradually making its presence felt, though slowly, in the affairs of the Indian Ocean, since the seventh century A.D.¹⁰¹ The decline of Tamralipta in c. 8th century immensely enhanced the importance of the Samatata-Harikela country. From the 8th century onwards the major area of sea-borne contacts between Bengal and other countries in the Indian Ocean became Samatata – Harikela where Samandar (near Chittagong) emerged as a great port.¹⁰²

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1. Franz Broeze (ed.), *Brides of the Sea*, Kensington, 1989: 8.
2. Ashin Dasgupta and M.N. Pearson (ed.), *India and the Indian Ocean, 1500-1800*, Calcutta 1987 (hereinafter *IO*): 9-10.
3. Charles Verlinden, 'The Indian Ocean: the Ancient Period and Middle Ages', in Satish Chandra (ed.), *The Indian Ocean, Explorations in History, Commerce and Politics*, New Delhi, 1987: 27.
4. For a general appreciation of this subject the following recent publications are of considerable help: Ashin Dasgupta and M.N. Pearson (ed.), *IO*; Satish Chandra (ed.), *op. cit*; K.N. Chaudhuri, *Trade and Civilization in the Indian Ocean: An Economic History from the Rise of Islam to the Seventeenth Century*, Cambridge 1985 and its sequel volume, *Asia before Europe, Economic Civilization of the Indian Ocean from the Rise of Islam to the Seventeenth Century*, Cambridge 1990.

5. Fernand Braudel, *The Mediterranean and the Mediterranean World in the Age of Philip II* (in two volumes), London, 1972-1973.

6. Fernand Braudel, *op. cit.*, I: 17.

7. A. Bhattacharyya, *Historical Geography of Ancient and Medieval Bengal*, Calcutta, 1977.

8. For example, R.K. Mookerji, *Indian Shipping: A History of the Sea-Borne Trade and Maritime Activity of the Indians from the Earliest Times*, Calcutta: 57.

9. A recent publication on this line and with this orientation is Vimala Begley and Richard de Puma (eds.), *Rome and India: The Ancient Sea Trade*, Bombay, 1992.

10. B.N. Mukherjee, *Kharosti and Kharosti-Brahmi Inscriptions in West Bengal* (India), in *Indian Museum Bulletin*, 1990 (hereinafter *IMB*, the catalogue published therein will be abbreviated as *ML*).

11. There is a definite thrust of historical researches on the western seaboard which has better contacts with West Asia and the Mediterranean world. The eastern littorals have recently received its due recognition, but mostly for the period after 1500 A.D. Vide P.J. Marshall, *East Indian Fortunes: The British in Bengal in the Eighteenth Century*, Oxford, 1976; Om Prakash, 'European Trading Companies and the Merchants of Bengal', *Indian Economic and Social History Review* (hereinafter *IESHR*), III, 1964 and Sinappah Arasaratnam, *Merchants, Companies and Commerce on the Coromandel Coast 1650-1740*, Delhi, 1986, Sanjay Subramanyam, *Improving the Empire*, Delhi; Ashin Dasgupta, *Vangopasagara* (in Bengali), Calcutta, 1989, who equates the Bay of Bengal with the eastern Indian Ocean, gives us a brief but clear understanding of the nature of maritime activities in this area in the post-1500 days.

12. B.N. Mukherjee's Bengali article in *Desh*, 5.12.92; 23-29 discusses the evolution of the connotation of the Indian Ocean.

13. Pliny, *Naturalis Historia*, trn. J. Rackham, London, 1942: 381; the text reads: "*Indorumque gens incipit, non Eoo tantum mari adiacens verum et maridiane quod indicum appellavimus*". (VI. XXI. 56).

14. Claudius Ptolemy, *Geographike Huphegesis*, trn. E.L. Stevenson, New York, 1932, VII. 1. 16.

15. The record was first edited with translation by R.G. Basak, *Epigraphia Indica* (hereinafter *EI*), XXVIII: 57-88. It was subsequently commented upon by D.C. Sircar, *EI*, XXVIII: 337-39. Sircar correctly assigned the record to regnal year 46 of Sricandra, i.e. 971 A.D.

16. For an elaborate analysis see Ranabir Chakravarti, 'Vangasagara-sambhandariyaka: A Riverine Trade Centre of Early Medieval Bengal', in Debala Mitra and G. Bhattacharyya (eds.) *N.G. Majumdar Memorial Volume* (forthcoming).

17. O.H.K. Spate and A.T.A. Learmonth, *India and Pakistan: A General and Regional Geography*, London, 1967.

18. *Ibid.*

19. *Periplus*, Sections 62-63, references to the *Periplus* are made here as per Lionel Casson (tm.), *The Periplus of the Erythraean Sea*, Princeton, 1989.

20. Ptolemy, *op. cit.*, VII. 1.81.

21. B.N. Mukherjee, *IMB*: 66.

22. B.N. Mukherjee, *ibid* : Appendix I, A List of Select Inscriptions (hereinafter Mukherjee List or ML).

23. *IMB*, 1990, ML, 5, 9, 10, 14, 21, 29, 37.

24. *IMB*, 1990, ML 60.

25. *IMB*, 1990, ML, 39.

26. *IMB*, 1990, ML, 2.

27. *IMB*, 1990, ML, 5.

28. *IMB*, 1990, ML, 9.

29. *IMB*, 1990, ML, 36.

30. *IMB*, 1990, ML, 10, ML, 6.

31. Hsuan Tsang, *Ta-Tang-Hsi-Yu-Chi*, tm. by S. Beal, Second Edition, 1983, New Delhi: 199-200.

32. *Periplus*, Section 64.

33. *Periplus*, Section 64. Malabathrum was probably not a product of Bengal proper and grown in the north-east frontier areas wherefrom it must have been brought to the port of Ganga for further shipment. Vide B.N. Mukherjee, *External Trade of Early North-Eastern India*, Delhi, 1992.

34. *Periplus*, Section 64. The trade from Gange to Limyrike must have been maritime, following the eastern littorals.

35. *IMB*, 1990, ML, 11.

36. Ranabir Chakravarti, 'Maritime Trade in Horses in Early Historical Bengal' : A Seal from Chandraketurah', *Pratnasamiksha*, I, 1992: 155-60.

37. B.N. Mukherjee, *IMB*, 1990.

38. Shu-Ching-chu, Ch. I, L. Petech, *Northern India According to the Shui-Ching Chu*, Rome, 1950: 53.

39. B.N. Mukherjee, *The Economic Factors in the Kushana History*, Calcutta, 1970: 37. 38.

40. B.N. Mukherjee, *IMB*, 1990: Plate XLI, Figs. 59, 61, 62. B.N. Mukherjee, 'Decipherment of the Kharosthi-Brahmi Script', *Monthly Bulletin of the Asiatic Society*, August, 1989. Significantly enough Chinese evidence of the celebrated voyages of Zheng He in the fifteenth century, records the export of horses from the Bengal coast to China. See Haraprasad Ray, *Trade and Diplomacy in India-China Relations: A Study of Bengal in the Fifteenth Century*, New Delhi, 1993: 118-20. This may suggest a continuity of a much earlier tradition of the shipment of horses from the Bengal Coast to S.E. Asia and China, though the details of this trade over the millennia are not known.

41. Himanshu Prabha Ray, 'Seafaring in the Bay of Bengal in the Early Centuries A.D.', *Studies in History*, VI, 1, 1990: 11.

42. For the reconstruction of the history of shipping in Europe visual representations of sea-going vessels on seals, medallions etc. have been used. Vide Charles Singer and others (ed.), *A History of Technology*, II, Oxford, 1979 (reprint): 563ff. J. Deloche, 'Konkan Warship of the Eleventh-Sixteenth Centuries as Represented on Memorial Stones', *Bulletin d 1 'Ecole Francaise d'Extreme Orient*, 1987: 165-84 demonstrates how sculptural depictions can be used for studying the shipping of past. D. Schlingloff, has made incisive enquiries of early Indian ships on the basis of the Ajanta Paintings, *Studies in the Ajanta Paintings*, Delhi, 1988.

43. *IMB*, 1990 ML, 51, fig. 63.

44. *IMB*, 1990 ML, 11, fig. 11.

45. *Periplus*, Section 44.

46. Ranabir Chakravarti, *op.cit.*, *Pratnasamiksha* I: 155-60.

47. Himanshu Prabha Ray, 'Seafaring in the Bay of Bengal in the Early Centuries A.D.', *Studies in History*, VI, 1 (n.s.), 1990: 1-14 cites evidence of the use of tripod masts in the depiction of early ships of South-East Asia, see particularly p. 6.

48. *IMB*, 1990, ML, 11, fig. 11.

49. Ranabir Chakravarti, *op. cit.*, *Pratnasamiksha*, I.

50. *IMB*, 1990, ML, 13, fig. 13.

51. A.N. Bose, *Social and Rural Economy of Northern India*, II, Calcutta, 1967.

52. *IMB*, 1990, ML 6, figs. 6a and 6b.

53. D. Schlingloff, *op.cit.* 200.

54. *IMB*, 1990, ML, 6.

55. *IMB*, 1990, ML, 10.

56. *IMB*, 1990: 47.
57. Chitteranjan Roy Choudhury, *A Catalogue of Early Indian Coins in the Asutosh Museum*, Calcutta, 1962: plate X.
58. *ibid.*, plate VIII.
59. *Kautiliya Arthasastra*, edited by R.P. Kangle, in three parts, Bombay, 1972 (hereinafter *KAS*), II. 28.
60. *KAS*, II, 28. 13.
61. *KAS*, II. 28.13.
62. *Amarakosa* of Amarasimha, edited by A.D. Sharma and M.G. Sardesai, Poona, 1941.
63. M.C. Joshi, 'Navigational Terms in the Namalinganusasana' in S.R. Rao, *Marine Archaeology*, Goa, 1991: 19, says that *potavanik* is a voyaging merchant. But the term *potavanik* which is the same as *vanikpota* may better be translated as a merchant vessel; the term *Yanapatra* stands better for a passengership.
64. M.C. Joshi, *ibid.*, considers *aritra* to be a rudders, but the actual meaning of *aritra* is oar. The use of rudder in early Indian visual representations of sea-going vessels is moreover a rarity; ships are generally found to have been fitted with a steering oar.
65. M.C. Joshi, *ibid.*, suggests that *karnadhara* should be the same as the sail operator, implying thereby that early Indian vessels had sails fitted to them. But except the famous painting of a ship at Ajanta, the sail is rarely shown in the depiction of an early Indian seal. The widespread and regular use of sail on Indian sea-going vessels is not beyond doubt. Moreover the commentary on the *Amarakosa* clearly states that one who holds the steering oar is the *karnadhara* (*karanamaritram dharyatiti karnadhara*). Ordinary sailors (*Kammakara*, literally meaning workers) were distinguished from the *niryamaka/niyamaka* (i.e. navigator). The latter appears to have been a member of a *sreni*-like body, as will be evident from the reference to a leader (*jetthaka*) of the *niyyamakas* (Jataka, IV, p. 137).
66. D.C. Sircar, *Select Inscriptions Bearing on Indian History and Civilization*, I, Calcutta 1965 (second edition): 497..
67. D.C. Sircar, *ibid*: 497, f.n. 4.
68. S.R. Das, *Rajbadidanga 1962, Excavation Report*, Calcutta, 1968; idem, *Archaeological Discoveries from Murshidabad*, Calcutta 1971.
69. Himanshu P. Ray, *op. cit.*, *Studies in History*.

70. D. Schlingloff, *op. cit.*: 200.

71. *ibid.*: 200.

72. Pliny, *Naturalis Historia*, speaks of the development of the sea-routes between India and the 'West' in four stages. Each succeeding stage provided shorter and safer journey to the voyager; the most developed route by the increasingly better utilisation of the s.w. monsoon wind facilitated a ship's voyage from the Red Sea port of Berenice to the Malabar coast in less than forty days.

73. Ptolemy, *op.cit.*, VII. 1. 15.

74. Fa-hsien, *Fo-Kuo-chi*, tm. H.A. Giles, *The Travels of Fahsien*, Cambridge, 1923: 65, ch. XXXVII.

75. J. Takakusu, *A Record of the Buddhist Religion as Practised in India and the Malay Archipelago* (tm. of *I-tsing's travels*), Oxford 1896.

76. J. Deloch, "Geographical Consideration in the Localization of Ancient Sea-ports of India", *Indian Economic and Social History Review*, XX, 4, Oct.-Dec., 1983: 439-48.

77. *Periplus*, Section 63.

78. Ptolemy, *op.cit.*: VII 1. 81.

79. *IMB*, 1990: 24.

80. For a general introduction to the site of Chandraketugarh see D.K. Chakrabarti, 'Chandraketugarh', in A. Ghosh (ed.), *An Encyclopaedia of Indian Archaeology*, II, Delhi, 1989: 95-96. For further notices of excavations carried out from 1956-57 to 1967-68 vide the relevant volumes of *Indian Archaeology: A Review*.

81. Ptolemy, *op.cit.*, VII. 1. Pliny, *op. cit.*, Vi.

82. Paresh Chandra Dasgupta, 'Some Early Indian Literary References to Tamralipta', *Modern Review*, October, 1953: 31-34.

83. Paresh Chandra Dasgupta, *ibid.*

84. For a general account of excavations at *Tamralipta* (Tamluk), see S.K. Mukherjee, 'Tamluk' in A. Ghosh (ed.), *op. cit.*, II: 430-31.

85. See in this context Asok Datta, 'A Report on the Field Survey in the Midnapur Coast', Section III of the unpublished report to the CSIR/EMR-II on the first year's work on the Indigenous Traditions of Navigation in the Bengal Coast (edited by B.N. Mukherjee and Ranabir Chakravarti). Gautam Sengupta, 'Archaeology of Coastal Bengal', paper presented to the International Seminar of Techno-

Archaeological Perspectives of Seafaring in the Indian ocean, New Delhi, 1994, also impresses upon the cluster of sites around Tamruk and points to the homogeneity of the material culture thereof.

86. D.C. Sircar, *SI* II, 1983: 36-40.

87. The significance of these terms from the point of view of navigation and in the context of the description of the riverine port of Devaparvata is discussed by Ranabir Chakravarti, 'Vangasagara-Sambhandariyaka', *op. cit.* As early as the sixth century A.D. eastern Bengal is found to have offered facilities of inland riverine navigation. The records of Gopacandra, Dharmaditya and Samacaradeva of Vanga (*SI*, I: 363-77) speak of new opening (*Navyavakasika*) towards the sea (i.e. Bay of Bengal) and ship-building harbour (*navatakseni*). The Gunaighar C.P. of Vainayagupta (507 A.D., *SI*, I: 340) provides us with the early references to *naudandakas* or boat-parking stations.

88. A.N. Bose, *op. cit.*, II.

89. B.N. Mukherjee, 'Kharoshti Inscriptions from Chunar (U.P.)', *Journal of the Asiatic Society*, XXXII, 1-4, 1990: 103-108.

90. B.N. Mukherjee, *External Trade of Early North Eastern India*: 34.

91. *Perplus*, Section 64.

92. Hsuan Tsang, *op. cit.*: 194-204.

93. Hsuan Tsang *op. cit.*: 201. Hsuan Tsang's description closely corresponds to the Jaina account which describes Tamalitti, i.e. Tamralipta as a *donamukha* (*dronamukha*), i.e. where land and sea routes converged. See in this context J.C. Jaina, *Life in Ancient India as Depicted in Jaina Canonical Texts and Commentaries*, Delhi, 1974.

94. *El*, II: 343-47.

95. *SI*, I: 234 and 235. J.C. Jain (*Life in Ancient India as Depicted in Jaina Canonical Texts and Commentaries*, Delhi, 1974) cites an interesting passage from the *Uttaradhyayana Sutra* (21. 2) which speaks of a journey by a merchant named Pallta from Campa to Pithuda (cf. Pityndra of Ptolemy) by a *Poya* (i.e. *Pota* or sea-going vessel). This voyage from Campa (near Bhagalpur) to Pithunda, between the deltas of the Mahanadi and the Krishna, must have been made through some ports in the Gangetic delta and then along the eastern sea-board.

96. Vimala Begley, 'Arikamedu Reconsidered', *American Journal of Archaeology*, LXXXVII, 1983: 461-81. For the significance of the widespread distribution of this ware from Sri Lanka to Chandrekutgarh along the entire length of the eastern sea-

board see Vimala Begley, 'From Iron Age to Early Historical in South Indian Archaeology, in Jerome Jacobson (ed.), *Studies in the Archaeology of India and Pakistan*, Delhi, 1986: 297-319; Vimala Begley, 'Ceramic Evidence for Pre-*Periplus* Trade on the Indian Coasts, in Vimala Begley and Richard de Puma (eds.), *op. cit.* 157-196; Himanshu Prabha Ray, 'Early Trade in the Bay of Bengal', *Indian Historical Review*, XVI, 1-2, July 1987-January 1988: 79-89.

97. *IMB*, 1990: 34 and 73. fig. 78.

98. See in this context the itineraries of Fa-hsien (H.A. Giles tm. *op. cit.*; Ch. XXXVII) and Itsing (Takakusu, trn. *op. cit.* 75ff.)

99. Hsuan Tsang, *op. cit.*: 200. The possibilities of contacts between ancient Gangetic delta and South-East Asia is further strengthened by the regular use of Kharostī in the legend of coins of Dvaravati, an area mentioned by Hsuan Tsang. See B.N. Mukherjee, 'The Coinage of Dvaravati in South-East Asia and The Kharostī-Brahmi Script' (forthcoming).

100. B.N. Mukherjee, *Economic Factors in the Kushana History*, Appendix.

101. See above, for the decline of Tamralipti, note 94.

102. B.N. Mukherjee, 'Commerce and Money in the Central and Western Sectors of Eastern India', *IMB*, XVI, 1982: 65-82.

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over, they acquired the knowledge of producing mild steel. Naturally, we can assume that iron technology must have played a key role in the process of urban growth in West Bengal.

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THE KAIVARTTA REVOLT—A PEASANT UPRISING IN THE PALA AGE

Rangan Kantl Jana

The only literary reference to the Kaivartta revolt and the subsequent recovery of Varendra (or Varendri) by the Pala king Ramapala is found in detail in the 12th century Sanskrit *kavya* *Ramacarita*, which was composed by Sandhyakaranandin¹ in the reign of Madanapaladeva, the second son of Ramapala and the fourth king from Ramapala, in the dynastic line. The poet certainly had direct knowledge of almost all contemporary events of Ramapala's reign as well as of his successors. The author's father Prajapati has been mentioned as a *Sandhi* (i.e. *Sandhivigraha*)². The name of the king under whom he served as a *Sandhivigraha*, i.e. the state functionary in charge of peace and war, is not clearly mentioned in the work.

The main historical events narrated in this *kavya* and elaborated in the old commentary are : an account of impolitic rule of Mahipala II, a successful movement or a revolt in the Varendri region led by the Kaivarttas, murder of Mahipala II, occupation of Varendra by the Kaivarttas and the Kaivartta rule, and finally the restoration of Pala rule in Varendri by king Ramapala with the help of his allies and feudatories. Apart from this *kavya*, the Kamauli Copper Plate inscription (verse 4) of Vaidyadeva³ who was the chief minister of Kumarapala (son of Ramapala), also mentions this historical incident, i.e. the Kaivartta rebellion and the restoration of Pala rule by Ramapala. According to Dr. R.G. Basak, the poet perhaps picked this historical clue as his subject matter of the *Ramacarita* from the above mentioned copper plate inscriptions of Vaidyadeva.⁴ One of the key figures of Ramapala's military camp against Bhima was Mahana (or Mathana), who has been mentioned as maternal uncle of Ramapala and who was of Rashtrakuta family.⁵ Reference to Mahana or Mathana is also obtained from verse 7 of the Saranath Inscription of Kumaradevi (Ramapala's daughter's daughter).⁶ Epigraphic evidence tallies with the information mentioned in the *Ramacarita* and in the commentary which certainly proves the historicity of the main theme of the work.

Sandhyakaranandin states that the father land (*Janakabhū*) of the Palas was seized by Divya^{7a} after having killed Mahipala II.^{7b} The commentary on verse 1.38 refers to '*Janakabhū*' as Varendri.⁸ In verse 1. of the *Kaviprasasti*, the land of Varendri is referred to as a *mandala* within the Pundravardhana-*bhukti*.⁹ This Varendri-*mandala* was situated between the river Ganga (which forms the western and the southern boundaries).¹⁰ The land of Varendri is also referred to as the source of two

rivers, namely the Valabhi and the Kali from large marshy land.¹¹ Locations of these above mentioned two rivers are not yet known. Several towns are also mentioned, such as, Skandanagara (unidentified), Sonitapura, which is another name of the old city of Kotivarsa of the *visaya* (district) of the same name,¹² and Ramavati, the capital city, which was built by Ramapala, perhaps after having liberated Varendri. The newly built city is certainly to be identified with Ramauti mentioned in the *Ain-i-Akbari*, which was a fiscal unit in the Sarkar Lakhnauti. The greater part of the Barind alluvium has been built by the detritus carried down by the Ganga, Atreyi, Punarbhaba, Karatoya, Mahananda, and a number of rivulets flowing through North Bengal. The soil was fertile. The *Ramacarita* refers to good quality paddy, sugar cane, cocoanut, arecanut, eatable roots, cardamom, cloves, various types of fruits and flowers etc.¹³ It was a *devamatrika-desa*, which depended on rain water for cultivation. The agro-economically rich Varendri was certainly under the Pala rule upto the reign of Mahipala II. Perhaps the Kaivarttas, like other communities, were settled in this zone for their economic interest.

Pala land-grants were mainly endowments by the king himself in favour of temples and religious foundations or individual priests, learned Brahmanas, institutions and persons combined and secular.¹⁴ Pala land-grant charters mention some well defined parts of lands namely *Vastu* (i.e. village habitat), *Kshetra* (i.e. cultivable land), *Khila-Kshetra* or *Khila* (i.e. uncultivated land or barren land), *Go-cara* (i.e. natural meadow).¹⁵ With the donation, the donee was to receive all existing taxes in cash and kind, which cultivators as well as other village dwellers had to pay to the crown. Different kinds of taxes are summed by the expression '*bhaga-bhoga-kara-hiranya-upari-kara*'. [which can be explained thus- (1) *Bhaga*, land revenues paid in kind. (2) *Bhoga*—periodical supplies of fruits, firewood, flowers and the like which the villagers had to pay to the king. *Bhogapati*, possibly collected this tax, from the land other than donated lands. (3) *Kara*— a general property tax levied periodically. (4) *Hiranya*—tax in cash levied upon certain special kinds of crops as distinguished from the tax in kind (*bhoga*) which was imposed on the ordinary crops. (5) *Uparikara*—impost levied on temporary tenants. Other taxes were such as customs tolls, ferry dues, and '*Cauroddharana*'— tax payable by the villagers for protection against thieves and robbers. It was collected by an officer name '*couroddharanika*'. Apart from taxes there were several fines, one of them was '*dasaparadha*' fines for ten criminal offences. It was collected by an officer named '*Dasaparadhika*'. In addition reference to another kind of tax is found in Khalimpur Copper Plate Inscription i.e. '*Pindaka*'. Nature of this kind of tax is not yet known. In Pala land-grants, with the reference of several specific taxes, other taxes mentioned as '*Adi*'¹⁶ as '*Sarvayasameta*' and as '*Samastaprataya*'. Every village dweller

had been advised to pay all taxes to the donee, but some taxes were not specifically mentioned. Perhaps the donee had an open scope to impose new taxes in his donated land.¹⁷ With the donation the crown (or the king) transferred all administrative and social obligations to the donee.¹⁸ The conditions and privileges are mentioned in the Pala inscriptions. The land was rent free. But the donee received the fines levied for committing 'ten offences'. Taxes in cash and kind, periodical taxes which had been so far deposited with the royal treasury, henceforth were transferred to the donee. The grants were perpetual in character. The land granted thus ceased to yield any revenue to the royal treasury. Even the queen, princes, entourage of the king, army personnel were advised not to disturb the set-up created by donation of land.

The order of the king in respect of any kind of land grant was communicated to different sections of the Pala administration. In this connection the Khalimpur Copper Plate inscription, the earliest of the Pala Land-grant charters so far known to us, refers to a long list of officials, who were informed about the donation, namely— *Rajanakas, Rajans, Rajaputra, Rajamatyas, Senapatis, Vishyapatis, Bhogapatis, Shashthadhikritas, Danda Saktis, Couroddharanikas, Dauhsadha-Sadhanikas, Dutas, Kholas, Gama-Gamikas, Abhitvaramana* superintendents of elephants, horse, cows, she-buffaloes, goats and sheeps, superintendents of boats, superintendents of the forces, *Tarikas, Saulkikas, Gaulmikas, Tadayuktakas, Viniyuktakas* and the other dependents of the king such as *Catas* and *Bhatas, Jyeshthakayasthas, Mahamahattaras, Mahattaras, Dasagramikas* and other district officials. More or less all the Pala land charters refer to big or small list of officials. The king's order regarding the land-grant was communicated to inform all sorts of administration about the transfer of all economic obligations. It is interesting to note that the crown asked for the approval (*matam-astu bhavatam*) from all quarters of administrative officers as well as village dwellers about the donation, which is evident from early Pala Land-grant charters, but afterwards they (i.e. administration as well as village dwellers) were simply informed regarding the donation. The term '*Matam-astu*'¹⁹ used in earlier records has been replaced by the term '*Viditam-astu*'.²⁰

The order was also communicated to the residents of the donated villages and to the cultivators, later mentioned as '*Karshakah*' or '*Kshetrakarah*'. in the Pala Land charters. It certainly reveals that apart from the officials and Brahmanas, the cultivators as a class played no doubt a very vital role in the economic life of the community. Pala Land charters do not mention any specific information with regard to the respective position of the Kshetraka and Karshaka. But it is possible that the bulk of the cultivators were non-proprietory tenants. All (i.e. village dwellers as well as cultivators) had to pay various kinds of taxes and local cesses, which

have been mentioned above. Possibly the cultivators faced two way exploitations, one from excessive taxes and the other from various types of exploitation mentioned in general in the copper plate charters as 'sarva-pidah'. This class faced exploitation under the crown particularly under the feudal lords, who served in the royal administration. In the land charters royal administration was informed not to interfere in matters relating to the land granted. It is hard to believe that there was no scope of exploitation in the donated land by the donee. Degree of exploitation was either the same as before or more. No doubt this cultivator class was only a true force of crop production, but in connection with crop distribution perhaps they had no power. In Pala land grant charters, there is no provision in favour of village dwellers and cultivators to apply for their grievances to the king against the donee. But they were advised to follow all duties in favour of the donee.²¹

Apart from big burden of taxes and local cesses, there were other type of oppression, which have been indicated in the Pala Land charters by the expressions '*a-cata-bhatapravesah*' and '*sarvapida*'. Certainly the king was quite aware about these malfunctions of his administration. So when he donated lands for religious purpose, land charters registered exemption of such matters, mentioned as '*a-catabhata-pravesah*' (i.e. prohibition on the right of entry of *cata-bhata*). Other services, which the cultivators and other lower class people had to perform occasionally to an army as provisions of quarters and supply of labour and as '*Sarva-pidah*', which is probably the provisions of food, on the occasion of a king or high officials visiting the locality and the prequisite paid on the occasion of birth of a prince, marriage of a princess etc. These were possibly not regular taxes, but the customary dues paid on specific occasions. There was perhaps another kind of oppression i.e. 'work without wages' (or forced labour). Possibly it still existed in the endowed lands. The scope of exploitation had fully been opened to the donee who perhaps took the advantage of 'work without wages' or forced labour. All source of income in the donated land was exploited. Though in Pala epigraphs there is no specific reference to this practice, the donee certainly had the power to cultivate his land in his own or to cultivate it by the cultivators. In this process the donee had the power of eviction which they could use easily. On account of this many cultivators turned to a mere non-proprietary tenants. On account of tax burden as well as of exploitations the general economic condition of the cultivators was gradually deteriorating. Land charters of this period do not refer to anything which may be regarded as a reaction on the part of the villagers. Such reactions could have been indicated (as mentioned by ancient Indian literature) by large scale exodus from villages²². Cultivators, however, could not easily leave their villages. Possibly the donee lawfully put strong resistance on them. On account of

this there was a possibility of vigorous reaction in forms of revolt.²³ Sandhyakaranandin, the poet of the *Ramacarita* mentioned only one such revolt in the Pala period in Bengal, i.e. Kaivartta Revolt.

The term 'Kaivartta' is stated in the *Kavya* as '*Kutsita inah Kaivartta Nrph*' (l. 12, Old. Comm.) and also as '*Kaivarttasya Nrasya*' (l. 29. Old. Comm.). About their social status and profession nothing has been described directly and distinctly. Several verses of the *kavya* focus some light on the above mentioned two factors. By profession possibly the kaivarttas were peasants, which can be inferred from verse ll. 40, which states that 'Bhima's army in frightfulness, which was liked very much by those people, who were excited on account of high taxation by former Pala ruler.....'²⁴, certainly taxation on those people, who were directly connected with land i.e. agriculture as their occupation. The *Kavya* (ll. 39-43) refers to them apart from *Caturangasena*²⁵, Bhima's army consisted of ill-equipped (literally-naked) buffalo riding soldiers with bow and arrow who put the last defence to protect their land i.e. Varendri. Possibly common village people of kaivartta community took part in the battle to save independent Varendri, under Kaivartta rule. The *kavya* further states (ll. 88) that after recovering his fatherland Ramapala introduced economic reforms relating to agriculture, cattle breeding and trade.²⁶ It can be virtually established that all these schemes were taken for redressing the grievances of the Kaivartta community.

The position of the Kaivartta in the caste hierarchy was low. Several ancient Indian texts refer to the Kaivarttas. Manu states that the Kaivartta, an alternative name of *Margava* or *Dasa*, was born of Nishada father and an Ayagava mother and boat man by profession. *Jatakas* refer to '*kevattas*' (i.e. Kaivartttas) as fishermen. The *Brahmavaivarta Purana* states that the Kaivartta is born of Kshatriya father and Vaisya mother. Ancient Smritis²⁷ refer to the issue of a Kshatriya father and Vaisya mother as Mahishya. According to the *Amara-kosha*, the Kaivarttas included both Dasa and Dhivara. It indicates that the Kaivarttas were from ancient time divided into two sections, the cultivators and fishermen.²⁸ On account of liberal Mahayana Buddhist ideology followed by the Pala kings, the Kaivarttas were not obstructed to get higher posts. From the *Ramacarita* it appears that on account of the presence of vertical mobility, Divya became a royal officer. Divya is mentioned as *Mamsabhuja* (l. 38 and Old Comm.), i.e. 'one who was an officer, in the enjoyment of the royal coffers'. It implies that higher posts were not always reserved for the higher caste. Due to this, Kaivarttas gradually became more powerful and a prominent community in Varendri. Haraprasad Sastri stated that 'Kaivarttas were a very powerful and warlike people in North Bengal'.²⁹ According to the orthodox *Dharma Sastras* and the Puranas union between men and

women belonging to different *varnas* was the origin of the *Jati* system in Brahmanical society. With the expansion of Aryan culture in different parts of India, specially in Eastern India, indigenous people belonging to various tribes in the hills and forests were absorbed within the society as low ranking *Jatis*. In Brahmanical society the transformed tribal groups adopting settled cultivation became a part of the jati-based economic system. Each group followed fixed occupations. Agriculture became the common occupation of several castes, generally the people engaged in agricultural occupation did not specialise in particular crops. All of them cultivate paddy, the common crop of Bengal. Traditionally the Kaivarttas were fishermen. *Casha-kaivarttas* formed the break-away group of the Kaivarttas, the prefix *casha* (i.e. peasant) being used due to their new occupation. The Kaivarttas mentioned in the *Ramacarita* possibly included both fishermen and peasants. Some of them changing their old occupation took new ones like cultivation and possibly they were larger in number.

It has been mentioned in this *kavya* that the Kaivartta king (mentioned as *kaivarttasya nrpasya*)³⁰ Divya (also mentioned as Divvoka, l. 38 and l. 39, old Comm.; Divoko. l. 31 old Comm.), occupied by force a large portion of Varendra, after having killed Mahipala II³¹. It is also mentioned that the Varendri region was known as *Divya Visaya*³². The Pala king Mahipala II was an oppressive ruler. Many verses³³ of the first canto of the *kavya* mention Mahipala's oppressive rule. On account of his oppressive rule he succumbed to a revolt of his feudatory chiefs (mentioned as '*ananta-Samanta cakra*'). There is no specific reference in the *Ramacarita* that Divya headed the rebellion of the feudatory chiefs. It can be at least inferred that there was a coup-de-tat by Divya, a high ranking officer, who took advantage of the weakness of the central authority and the disruption of the Pala power as well as kingdom, perhaps for the sake of the oppressed kaivarttas. Several negative adjectives are used to the kaivartta king Divya such as '*kutsita inah kaivartta nrph*' i.e. bad king (l. 12); as *dasyu* (l. 38) as '*Chhadmanivrat*' i.e. plea, pretext fraud, dishonesty, trick (l. 38); as '*Mamsabhuj*'^{34a} i.e. one who was an officer (*vrtya*) in the enjoyment of the royal coffers i.e. Divya was a royal officer or functionary during the reign of Mahipala II; as '*Uchhaidarsakena*'^{34b} i.e. who was in high position in the state i.e. certainly Divya as an officer held a high rank status. From the last two terms it can be inferred that Divya was an officer and possibly was in '*Rajapadopajivi*'³⁵ class; and as '*upadhivratena*' (l. 38- Old Comm.) i.e. one who took it as a necessary means to act perfidiously against his own monarch, whose death he brought about treacherously and occupied Varendri. He became an enemy of the royal house. He had no claim to the throne, which actually belonged to the Pala dynasty.

About the unrest (or revolt) the *Kavya* refers to '*anikamdharmaviplavam*',³⁶ i.e. unfortunate civil revolution; '*Damaramupaplavam*'³⁷ i.e. disturbance caused by the enemy. These adjectives were used to Divya and to the Kaivartta revolt from a poet, who was a pure partisan of Ramapala, the Pala king. He was not an impartial critic to the enemies of Ramapala and the Pala throne. The *Ramacarita* does not mention any relation of the revolt by the feudatory chiefs (*ananta samanta cakra*) with the kaivartta revolt, though both have been mentioned in some old commentary of (l. 31). If Divya led the rebellion of the feudatory chiefs, it may perhaps be inferred that he did so for saving the country (precisely Varendri) from the oppression of the ruling king. Divya was prompted to take the throne like Gopala, the founder of the Pala dynasty. In this connection one thing should always be remembered that this *Kavya* has mainly described the Kaivartta revolt in Varendri region and its subsequent recovery by Ramapala, which was precisely Ramapala's achievements.

The *Kavya* did not refer to any direct cause behind the revolt. But the poet as well as the old commentator applies to a compound adjective to Mahipala II as '*anitikarambharate*'³⁸ (i.e. one who engaged himself in actions, which always against the code of laws). Obviously Mahipala by his impolitic acts incurred the displeasure of his subjects. Another term '*vyasani*'³⁹ i.e. the danger of anarchy due to Mahipala's impolitic actions and also as '*citrakutam*' i.e. one whose fraudulent behaviour was of diverse character.⁴⁰ The nature of oppression was economic. The *Kavya* refers to 'Bhima's army in frightfulness, which was liked very much by those people, who were excited on account of high taxation during the reign of previous Pala ruler.'⁴¹ Heavy taxation was the chief cause of the revolt. Possibly the cultivators had faced severe exploitation, which can be proved by another reference. It refers to Bhima's army consisting of ill-equipped buffalo-riding soldiers with bow and arrow put the last war of defence against the huge army of Ramapala to protect their own interest.⁴² No land charter of the reign of Mahipala II is known to us. Several land grant charters of the Pala rulers mainly record religious endowments in favour of Vaisnava, Saiva and Buddhist monks and Brahmanas. Apart from these, there is reference to a secular endowment for unspecific service to the Kaivarttas.⁴³ Afterwards it was taken back by the king and donated to a Brahmana. It is difficult to opine that this above mentioned case was followed later. R.S. Sharma stated that this was another cause of the Kaivartta displeasure in Varendri region.⁴⁴ It has been already discussed above how the donee could exploit all sources of income in donated village as well as the main force of crop production i.e. the cultivators, for their own economic interest. The *Kavya* refers to

fearful administration during Kaivartta rule. (III. 31); R.D. Banerji states that they 'began to harass the people'⁴⁵; the old commentary of the *Kavya* further states that 'after crushing Bhima's work of protection, Sivaraja was quarring about *Visayas* and villages for the protection of *Deva-Brahmanadibhumi*' (I. 48). From these references an inference can be drawn that a class of people, possibly donees, were one of the chief economic exploiters. So during Kaivartta rule, behaviour towards donee were not favourable. In this connection, the *Kavya* (III. 27) mentions that during Kaivartta rule cruel taxation was imposed (mentioned as *Krurakara*). After the recovery of Varendri Ramapala introduced mild taxation (mentioned as *Mrdukara*). So when Sivaraja crushed the work of defence of Bhima's army, he first directed his interest to secure 'Deva-Brahmanas' possessions as well as rights, which had possibly been crushed during Kaivartta rule by their fearful administration. After liberating Varendri Ramapala introduced economic enterprise⁴⁶ namely agriculture, cattle breeding and trade. He also levied mild taxation.⁴⁷ So the country flourished by good cultivation. All measures perhaps had been taken to pacify the Kaivarttas for their economic emancipation and of those people who were harrassed during Kaivartta rule.

It can certainly be inferred that economic exploitation such as heavy taxation was the main cause of vexation, because cultivators as a class served under both the royal administration as well as donee, as a chief force of crop production though they had no power of distribution. The most important historical fact known from the interpretation that after crushing the Kaivartta revolt Ramapala could not neglect the Kaivartta force in Varendri region. He established the chief Hari (who was at first a friend and ally of Bhima but who later deserted him) in a position of great influence or in a high rank filled with great power.⁴⁹

Having liberated Varendri, Divya according to the Belava Copper plate of Bhojavarman⁴⁹, possibly came into conflict with Jatavarman, the Varman king of Vanga (i.e. East Bengal), Divya was an able ruler and he made his position in this region on strong base. During his reign Ramapala's efforts to recover Varendri was unsuccessful.⁵⁰ According to the *Kavya*⁵¹ and Manahali Copper plate (verse-15), Ramapala's dominion was invaded by Divya or by his partisans. The *Kavya* further uses the expression '*Yathokta kramena*'⁵², which proves Divya-Rudoka (Divya's brother). Bhima (Rudoka's son) ruled in Varendri in unbroken chain. Nothing is known about Rudoka. Though the poet was partisan of Ramapala, he did not forget to praise Bhima, the Kaivartta king, as 'the restorer of peace and prosperity' (I. 39); 'the defender of those who required defence, the kings, belonging to his own party, secured their own safely from their victorious

enemy' (ll. 21); 'the abode of all treasures in whose possession, there were excellent cavalry, elephant, troops etc. He was learned and rich' (ll. 23); by getting whom as its king, the whole world got prosperity in plenty and virtuous men obtained unsolicited charities and the earth also found peace (ll. 24); 'he was a liberal minded ruler, who possessed the nature of the wish giving tree (i.e. *Kalpavrksha*) and who appointed deserving men to hold high posts in administration' (ll. 25). 'He was noble minded and followed a righteous course of conduct and he never transgressed the bounds of decorum and was not greedy' (ll. 27). From above references it can be certainly inferred that Bhima made a well guarded, prosperous and well administered government. He was liberal minded and quite accessible to the people (i.e. mentioned as *Kalpavrksha*).

It is evident that all the three rulers came from one family⁵³ and this family previously served under the Pala throne with high administrative position.⁵⁴ So automatically this family secured the leadership position in the community during the time of revolt as well as their independent rule. Their position in the community was high and respected. The *Kavya* specially did mention Bhima's rule in the Varendri region.⁵⁵ Possibly Bhima was able to restore peace and tranquillised all grievances of the Kaivarttas, which evolved due to the impolitic rule of the former Pala ruler. So the poet even as a portage of the Pala dynasty did not forget to eulogise Bhima. It is also evident that in Varendri 'king-subject' type of rule was not banished, but possibly there was a spontaneous people's representation to serve the new administration for the sake of the common people (mainly Kaivarttas) to serve the independent government during the time of calamity (i.e. war). When Rampala with a big force of '*ananta samanta cakra*' came to recover Varendri, apart from '*caturanga-sena*' Bhima's army consisted of ill-equipped buffalo riding soldiers with bow and arrow who put the last defence to protect their own land, but ultimately they were totally crushed. Divya-Rudoka-Bhima served independent Varendri no doubt as a ruler,⁵⁶ but perhaps as a representative of the community. The community interest possibly played a big role in their reign. Few archaeological monuments were discovered from Dinajpur (in Dhivaradighi, known as Kaivartta Stambha⁵⁷, another from Rajshahi district of modern Bangladesh (known as 'Divya-Stambha'). It is difficult to say who installed these, but certainly these pillars were installed during Kaivartta rule to felicitate their victory against the Pala power. Though it was for a very short period.

The *Kavya* and the old commentary do not mention the time span of the Kaivartta rule in Varendri. It is clear that the Kaivartta revolt broke out during the reign of Mahipala II (l. 31 and old Comm.). At that time his two brothers Surapala and Ramapala were in prison (l. 31, Old Comm.; l. 32-37, and Old Comm.) The Pala king Mahipala was murdered by the

Kaivartta king Divya⁵⁸, After Mahipala II, Surapala became the king. But the *Kavya* did not mention anything. The Manahali inscription of Madanapala mentions Surapala as the next king⁵⁹. According to the *Kavya* Ramapala became the king. Possibly during his early half of reign Ramapala recovered Varendri from the Kaivartta rebels. A logical inference can be drawn that the Kaivartta revolt as well as independent Kaivartta rule in Varendri had happened in the last quarter of the eleventh century A.D. According to Professor Nihar Ranjan Roy the time was from 1075 A.D. to 1100 A.D.⁶⁰. But it is hard to delimit the exact time span.

After securing the Pala throne, Ramapala's first target was to recover his father land, crushing the Kaivartta rebels and to regain supremacy of the Pala power. The *Kavya* states that 'Rampala took counsel from his ministers and son as regards 'what is to be done under the circumstances.'⁶¹ Certainly Ramapala had realised that with his own military capacity, it was impossible task to fight against the Kaivarttas. It indirectly proves the power and strength of the Kaivarttas,. In order to set up a big military force he along with his son travelled over many parts of Bengal and adjacent Bihar.⁶² By lavish offer of land and enormous wealth, he gained over his side a number of powerful chiefs who possessed well equipped forces⁶³

The Old. Commentary of the verse I. 43 and I, 44 mentions two terms '*Samantacakram*' and '*Samantavrajam*'. With '*Samantacakram*' the poet and the commentator referred to '*vyala*' (i.e. to mean rulers who seized or appropriated to themselves *agrahara* lands), Atavika (i.e. to mean vassals in the forest regions); and *Vaisayika* and *Agrahika* respectively. With '*Samantavrajam*' (*Vraja* means 'samuha' or circle of samantas) refers to '*Anvayasyabhyaudayasya*' (i.e. to mean the source of retinue, according to the Old Comm. - the source of prosperity). Though the *Kavya* refers to them as *Samanta*, possibly they were de-facto sovereign rulers. Decline in the Pala central authority gave them certainly an opportunity to assume higher prerogatives, though they did not declare themselves free. During the time of Kaivartta revolt, whole of Bengal and Bihar were divided into many small states. Names of the samantas who participated in Ramapala's military venture have been mentioned in detail in verses II.5; II.6; II.8 respectively. This list of de-facto independent chiefs (often they exercised independent authority) shows the political dismemberment of Bengal caused by the gradual decline of the power and authority of the Palas. It can be inferred that only for financial gain they attached themselves with Ramapala. One scholar⁶⁴ opined that there was a class struggle. So de-facto samantas did join with Ramapala against the Kaivarttas. He also stated that due to the fear of spreading this type of revolt all over Bengal and Bihar, samantas joined in Pala War-camp to

demolish it in core.⁶⁶ Some scholars depict the military confederation as national unity of the samantas against the Kaivarttas. It is better to say a class unity among these samantas under the leadership of Ramapala to uproot such a rebellion in the core. Possibly such type of people's movement under the leadership of Divya and Bhima from the Kaivartta community gave a big blow to so-called higher class and caste samantas. So apart from financial as well as material gain, one common interest was to crush common people's vexation in the form of revolt. Being joined by the large and well equipped forces of the confederated chiefs, consisting of cavalry, elephants, and infantry, Ramapala moved to recover his father land Varendri. The place where the battle took place, has not been clearly indicated. According to R.D. Banerji it took place somewhere on the south-western side of Varendri.⁶⁶ The war picture is depicted in detail in the *Kavya*.⁶⁷ Lastly, Bhima, the Kaivartta king, could not protect Varendri. The Kaivartta rule in Varendri was crushed and Bhima with his family was captured and killed. In various parts of North Bengal remains of big wall known as 'Bhimer Jangal' or 'Bhimerdaing' still exist. Possibly it was Bhima's work of protection during his war against the combined samanta forces under the Pala king Ramapala.⁶⁸

To conclude, the Kaivartta revolt was, no doubt, a peasant revolt with common people's support mentioned as '*anikamdharma viplavam*' (I. 24) i.e. unfortunate civil revolution. Possibly the rebellion was the result of a long run class exploitation (precisely economic exploitation in the land system), which turned into a violent armed rebellion. Perhaps, class consciousness and community consciousness merged with one another at the time of revolt. In the history of mankind, in every people's movement an ideological force does act as a catalyst. In core of Kaivartta rebellion the question is : had there been any ideological force active behind it?. Very recently one renowned scholar has engaged himself to find out its ideological background.⁶⁹ According to him a religious faith acted as an ideological force in favour of the Kaivarttas. It was *Siddha* movement in Bengal. This *Siddha* movement had flourished in the early years of the eleventh century A.D., during the reign of Mahipala I. From logical point of view this question cannot be neglected. But from historical point of view the poet as well as the commentator did not mention any such religious influence in favour of the Kaivarttas (by the Siddhas) against the Pala power and their popular religious faith. The policy of the Palas was two fold (1) to promote their own popular Mahayana Buddhist ideology and (2) to promote traditional Brahmanical religion under Brahmana supremacy. If Dr. R.G. Basak's interpretations are considered as correct, then certain inferences can be drawn on the basis of the informations which have been mentioned in the *Kavya* in favour of the Mahayana Buddhist ideology that a Mahavihara (III. 7) named Jagaddala Mahavihara

with the image of Avalokitesvara and Tara, was situated near the newly built city of Ramavati. This *vihara* was founded before Ramapala. During Kaivartta rule Bhiksus deported from Varendari. After its liberation by Ramapala, they were resettled in Varendri (mentioned as 'Ramapala could no longer tolerate impious actions in Varendri')- '*Durjjana dushita caryya*' - i.e. 'where the deportment of Bhiksus could not be polluted by evil doers' (IV. 2). During Pala rule many lands and villages were donated to the Viharas as religious endowments, namely - Uddantapuri, Vikramasila, Nalanda, and Jagaddala, which are evident from Pala land grant charters.

In favour of Brahmanical religion as well as special interest towards Brahmana community, the *Kavya*, mentions that the city was in short time beautified with the temples of various Brahmanical gods and goddesses Brahma, Siva, Visnu, the twelve Adityas, the eleven Rudras, Ganesa, Kartikeya, the Vasus and the Visvadevas. Archaeological remains prove the existence of many stone images of many of these gods and goddesses. In Varendri there were large number of Brahmana settlements, which gave rise to the clan of Brahmins called Varendri at a later period (III. 9); a place of pilgrimage named Apunarbhava was also situated in Varendri on the river Karatoya (III. 10). Ramapala after liberating Varendri established many temples of Siva (mentioned as Sivalayatriyate) on hill tops in order to pacify his own people (III. 41). There is no specific reference to 'his own people. No doubt they were Saivas. Now the question is — were they Kaivarttas? There is no specific information about the religion of the Kaivarttas. The Kaivartta king Bhima, has been mentioned as a devotee of 'Siva and Gauri' (II. 26). It does not, however, imply that the Kaivarttas were all Saivas. In this connection, the *Natha* movement deserves more attention. Nathas⁷⁰ were regarded as super human beings. They had large number of disciples. Adinath, Matsyendranath, Minnath were all Buddhists by faith. But Gorakshanath, who was originally a Buddhist, later became a convert to Saivism. He was hated by the Buddhists. In Nepal they were regarded as Buddhists. But according to Haraprasad Sastri⁷¹ their religious ideology was quite different from Buddhist as well as Brahmanical religious faith. They introduced a form of secret and mystic worship. Their literature was written in the form of Tantra with the 'Hara-Parvati Samvada'. They perhaps first introduced Hathyoga in religious practice. Nathism flourished in or about eleventh century A.D. As mentioned above Bhima was a devotee of 'Siva and Gauri'. Now the question is, was he or his Kaivartta community influenced by these Natha Yogis? It needs further research. Nathas possibly had their habitat in Eastern India or Bengal, because some of their 'padas' were written in pure Bengali style.

The original *Kavya* and the old commentary do not refer to any religious cause in favour of the rebellion, though a Buddhist text

'*Adikarmavidhi*', written by one Tathakaragupta mentions that Kaivarttas, fishermen by profession could not get opportunity to baptize themselves into Buddhism.⁷² Possibly this Buddhist injunction was due to their (Kaivarttas) killing of living creature, which was connected with their profession. This was against Buddhism. Due to imposition of this rule, the Kaivarttas became dissatisfied against the Pala rule as well as Mahayani popular Buddhism patronised by the Palas. It is difficult to infer in this regard without adequate information.

The Kaivartta revolt⁷³ is a rare historical event in the history of ancient India as well as Bengal. No other ancient Indian text does mention any type of such vigorous reaction in form of revolt of the peasant as well as common people during that time or earlier.

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3. Akshaya Kumar Maitreya, *Gaudalekhamala*, Varendra Research Institute, 1919 (B.S.), p.129 'Kamauli Copper plate Inscription.

4. Sandhyakaranandin, *Ramacarita*, *MASB*, vol. III, No. 1, Calcutta, 1969 (reprint), pp. 120-121

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7a. Sandhyakaranandin, *Ramacarita*, *MASB*, vol. III, no.1, Calcutta, 1969 (Reprint), p. 26 (l.38).

7b. *Ibid.*, p-20 (l.29).

8. Hemacandra's '*Abhidhanacintaman*', mentions '*Varendri*' - as the wife of Varendra' i.e. Rama'. According to D.C. Sircar '*Janakabhu*' does not mean motherland. It means paternal or ancestral territory or kingdom (See R.P. Chanda, *Gaudarajamala*, Calcutta, 1975, p. 0.13 'introduction).

9. *Journal of the Asiatic Society of Bengal*, New series, vol. XII, p. 293 'Talcher grant of Gayadatungadeva'.

10. Sandhyakaranandin, *Ramacarita*, *MASB*, vol. III, No. 1, Calcutta, 1969 (Reprint), p. 63 (III. 10).

11. *Ibid*, page-64 (III. 11).

12. Hemacandra in *Abhidhanacintamani* mentions another name of Bangarh (or Bannagara). Possibly it refers to that part of the country in the old Dinajpur district which was situated to the north of Rajshahi (presently in Bangladesh).

13. Sandhyakaranandin, *Ramacarita*, *MASB*, vol-III, no. 1, 1969 (Reprint) pp. 64-68 (III. 12 to III. 22).

14. *Epigraphia Indica*, vol. XXIX, Dehli, 1951-52, page 6-9. 'Belwa Copper Plate Inscription' (during the reign of Mahipala I) line-29 refers to 'Osinna-Kaivarttavritti' (i.e. Osinna which had been once allotted to the Kalvarttas for their service).

15. The expression '*trnaputigo caraparyantah*' i.e. Pasture ground, has been referred to the most of the Pala Land Charters.

16. *Journal of the Asiatic Society of Bengal*, LXIX, p. 66. 'Manahali Copper Plate Inscription' of Madana Paladeva. This inscription refers to '*Bhagabhoga hiranyadipratyaya sametah*'.

17. R.S. Sharma, *Indian Feudalism* (Bengali translation), Calcutta, 1985, p. 100.

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23. R.S. Sharma, *Indian Feudalism*, (Bengali translation), Calcutta, 1985, p. 226.

24. There is no Old. Comm. of the II. 40. Translation as well as interpretation have been made by Dr. R.G. Basak. In his note (see *MASB*, Vol-III, No. - I Reprint 1969, p. 136) he refers to the meaning of '*Sambaramadam karakshobhi-ruchitam*' as 'Bhima's army in frightfulness, which was liked very much by those people, who were excited on account of high taxation'.

25. Sandhyakaranandin, *Ramacarita*, *MASB*, vol. III, No. 1, 1969 (Reprint), p. 56-*Naga* i.e. elephant (Il. 39); *Baji* i.e. horse (Il. 40); Ratha is Chariot (Il. 40); patti i.e. foot Soldlers (Il. 41).

26. *Ibid.*, p. 50 (Il. 28)- '*varttaya*'- by introducing of economic organisations (e.g. agriculture, Cattle breeding and trade). According to Arthasastra (I.14) - '*Krshi pasupalye Banijja Cavartta*'.

27. Gautama *Dharmasutra*, (ed) A.S. Stenslor, London, 1876, (IV. 20); Yajnewalkya *Smrti*, Coukhamba Sanskrit Series, Varanasi, 1930,(I. 92).

28. P. Tarkaratna (ed), *Brhaddharma Purana*, Calcutta, 1827 (Saka), It refers to the caste '*Dasa*' (i.e. cultivator) as '*ultima Samkara*' and '*Dhivara*' (i.e. fisherman) as '*madhyama Samkara*'.

29. Sandhyakaranandin, *Ramacarita*, *MASB*, vol. III, No.-1, Calcutta, 1969 (Reprint), p. XXVII (Introduction).

30. Sir M.M. Williams '*A Sanskrit-English Dictionary*, Oxford, 1976, p. 568, '*Nrpa*'- Protector of Man or king.

31. Sandhyakaranandin, *Ramacarita*, *MASB*, vlik, III m B1,-1, 1969 (Reprint), p. 20 (I. 29).

32. *Ibid.*, p. 79 (IV. 2).

33. *Ibid.*, pp. 14-15 (I. 22); pp. 21-22 (I. 31) p. 22 (I. 32); pp. 24-25 (I. 36); pp. 25-26 (I. 37).

34. *Ibid.*,

34a. P. 26, (I. 38- Old Comm.) - '*Ma + Amsa + bhuk*', i.e. one who was an officer in the enjoyment of the royal coffers. i.e. Divya was a royal officer.

34b. P. 26, (I. 38-Old Comm.)-'*uccaiḥ + dasa + svarthe*', Samasanta '*ka*' prateya in Vahu-vrihi Samsa, means one who was in a high position in the state, i.e. Divya was a high ranked official.

35. Pala Land Grant Charters refer to a term '*Rajapadapajivin*' to denote those samantas, who served in the Pala administration. The term first occurred in the earliest Pala Land Grant Charter i.e. Khalimpur Copper Plate Inscription' (see *Epigraphia Indica*, vol. IV, p. 243 ff) Perhaps their economic self interest was connected with the central power on one hand and on the other was linked with the small as well as big feudal lords.

36. Sandhyakaranandin, *Ramacarita*, *MASB*, vol. III, No. 1, 1969 (Reprint), p. 16-17 (I. 24) and P. 114. '*Anikam*' is to be taken as the adjective of '*Dharma-Viplavam*' i.e., the violation of duty in a civil revolution, which is unholy or not leading to prosperity.

37. Ibid, pages 18-19 (l. 27), p. 115. The term '*Damaramupapuram*' i.e. a pura or city named after '*Damara*', according to H.P. Sastri, is perhaps incorrect. In *Vaijayanti* of yadava (Opperta edition p. 98) mentioned '*Damarapaplavotpata*' i.e. '*upadrava*', '*upsarga*', '*upaplava*'. The word means 'a state of anarchy or revolution'; Kautilya in the *Arthasastra* Book II. 6) used this word in the compound '*Damaragatasvam*' as a kind of '*Anyajatah Ayah*'. The Book (IV. 9) refers to another word '*Damarika*'; The Buddhist sanskrit text *Mahavastuavadana* (Calcutta Sanskrit College edition) mentioned the word '*Damara*' in vol. I, pp. 42, 344, 362, 369 and vol. II, pp. 95 and 249 in such phrases as '*Prasanta Dimva Damarah*' and '*prasanta Danda Dimva Damarah*'.
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45. R.D. Banerjee, *The Palas of Bengal*, Calcutta, 1973 (Reprint), p. 45.
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50. Sandhyakaranandin, *Ramacarita*, *MASB*, vol. III, no. 1, 1969, (Reprint), pp. 27-28 (l. 40-41).
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A NEW LIGHT ON THE BHAUMAKARA ERA

Satya Saurabh Jana

I

The Bhaumakaras of Orissa ruled for at least two centuries¹. An era initiated by them is called Bhaumakara era. Their first and last rulers were Kshemankaradeva (736 A.D.) and Dandimahadevi (916, 923 A.D.) respectively. Sivakaradeva I was the second ruler of the Kara dynasty, who first made a bid to extend their Kingdom.

R.C. Majumdar recorded the following observation on the extent of the Bhaumakara Kingdom : "We can get a fair idea of the dominions of the Karas from the names of villages mentioned in their landgrants. In addition to the coastal territories comprised in the modern districts of Balasore, Cuttack and Puri, their dominions included Angul, the old feudatory states of Hindol, Dhenkanal, Talcher, Pallhra, a part of Keonjhar and the northern part of Ganjam district. These territories are sometimes referred to as included in North and South *Tosali*, but the name *Utkala* also occurs in the records".²

According to K.C. Panigrahi,³ "From the Baud plates of Tribhuvana Mahadevi II it is evident that Dandakabhukti (Danton, Midnapore district, West Bengal) was also included in the Bhauma Kingdom. Ibn Khordadbeh mentions in his itinerary of the different divisions of the Bhauma Kingdom starting from the estuary of the river *Godavari* which comprised Orissa proper, Kanja (Ganjam), Jharkhand (the hilly regions) and Mahisya (Midnapore)". The Karas are also known to have extended their sway over the Radha region.⁴

II

Recently an inscribed and partly broken slab of stone was discovered by P. Ray in a temple at Madhavpur, within the jurisdiction of Chandrakona P.S. in the Midnapore district of West Bengal.⁵ It bears on one side the figure of the goddess Kali, stylistically assigned to the medieval age⁶ and on the other an inscription consisting of 19 lines. Palaeographically it is dated to about the end of 12th century A.D. by B.N. Mukherjee and P. Ray.⁷ They think that the characters deployed in this record are similar to those used in the Naihati copper-plate inscription of Vallalasena (c.A.D. 1159-79) and the Anulia copper-plate inscription of Lakshmanasena (c.A.D. 1179-1206).⁸

At the end of line 15 of the inscription appears a date, which can be read as '*ashtashashadhika - tri - vatsarasata pragate*' i.e. "three hundred years exceeded by sixty-eight having elapsed". It is also supported by the expression "Sa(mvat) 368" in L. 15.

The donor of the inscription is described as *Radhasri* i.e. "the glory of *Radha* or *Radha*". It proves that at that time the Midnapore area of West Bengal was within the geographical limits of *Radha*.⁹

The internal evidence of the inscription proves that a temple was constructed in the year 368 which is referable to an era, whose fourth century roughly corresponded to c. 12th century A.D. We do not know of the existence of any such era current in West Bengal. However, the use of Bhauma Kara era in the adjoining region of Orissa is wellknown to us.

III

There is controversy among scholars with regard to the initial year of the Bhaumakara era. It is fixed as c. A.D. 831 by D.C. Sircar¹⁰ and c. A.D. 736 by R.C. Majumdar.¹¹ The latter view is supported by K.C. Panigrahi.¹²

It is well-known that the feudatories of the Bhaumakaras using the same era owed complete allegiance to their overlords, but gradually they became semi-independent with the growth of their power.¹³ The Bhanjas of Khijjinga (mod. Khiching in the Mayurbhanj area) were one of the feudatories of the Bhaumakaras. At least a part of modern Midnapore district of West Bengal was within their domain. The Bhanjas also used the Bhaumakara era.¹⁴ B.N. Mukherjee and P. Ray placed the year 368 of Madhavpur inscription in c.A.D. $(736 + 368 =) 1104$.¹⁵

But we may consider the view of D.C. Sircar according to whom the Bhaumakara era started from A.D. 831¹⁶ Then the year 368 of this era would correspond to c.A.D. $(831 + 368 =) 1199$. It is also supported by palaeographical evidence and can be placed in the last quarter of the twelfth century.

'Madhavpur inscription' is thus important for more than one reason. First, it is the only inscription from the state of West Bengal which appears to be dated in a year referable to the Bhaumakara era. Secondly, the Bhaumakaras or at least a branch of their feudatories extended their sway over the Midnapore region. Thirdly, palaeography of this inscription seems to lend support to the theory of D. C. Sircar on the initial year of the Bhaumakara era i.e. A.D. 831

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CONCEPT OF NIBBANA IN THE KHUDDAKANIKAYA

Kalyani Dhar

With the panorama of Indian religio-philosophical thought and views, the *concept of Nibbana* as a distinct term alone can stand unique in the Pali as well as in the ancient Indian literature. The term occurs nowhere in any of the Vedic or Brahmanic texts that may be definitely assigned to pre-Buddhistic dates. It is found in Panini's *Astadhyayi* accounting grammatically or etymologically for the formation of the word *Nibbana* - 'Nirvana' ('Nirvano vate', VIII, 2,50). To express the purport of *Nibbana*, the very first declaration, which should be put forward, is that there is no cause or condition that would bring about Nibbana itself; so it is the evils—the diminishing of the vicious and the weak in man. It is neither past nor future, nor present, nor produced, nor not produced, nor producible. Only *visuddhi* or purity is the main ethical term to clarify the natural disposition of *Nibbana*.

The inherent qualities of *Nibbana* consist of absence of passion, destruction of pride, avoidance of thirst, freedom from attachment and destruction of all sensual pleasures. It is not just void (*sunnam*) but it is something which is predicateless (*sunnatā*). It is the utmost end which can be obtained by the best exertion (*Yogahkhemam*).

As a whole, *Nibbana* indicates freedom from all existence and eradication of existence in all forms in terrestrial or non-terrestrial plains. There is no perpetual or never-ceasing existence in *Nibbana*. Therefore, *Nibbana* is not eternal. It is the eternal cessation of all kinds of impels for uninterrupted continuity. As *Nibbana* is repeatedly delineated as wholly dissimilar from everything wordly or constituted, a person can accomplish it by making ownself free from the wilderness of misdeeds. It is the only medium from which the arrow of desire has been removed. It is so-called because it is a total departure from the craving (*tanhakkhaya*) which is called *vana*. It is inconceivable transcendental (*uttara*) reality. It makes all *bhavas* leading to pain subside.

It can be stated without any exaggeration that *the above ecstatic statements have been gleaned more or less from the fifteen texts of the Khuddakanikaya*. Among these texts, in the *Khuddakapatha* and *Dhammapada*, *Nibbana* is immortal or in other words, it is imperishable, the opposite of which is death or demise. There are a few chapters in the *Dhammapada* which attach great importance to the *ideas of Nibbana*. There are two verses in the *Appamadavagga*, according to which the *heedless die; the heedful do not die*.

*Appamado amatapadam, pamado maccuno padam, / appamatta na miyanti, ye pamatta yathamata.*¹

Heedfulness is the path to the deathless, heedlessness is the path of death. The heedful do not die; the heedless are like unto the dead.

*Te jhayino, satatika, niccama dalhaparakkama, / phusanti dhira nibbanam, yogakkhemam anuttaram.*²

These wise people, meditative, steady, always possessed of strong powers, attain to Nirvana, the highest bliss.

In the *Udana*, *Nibbana* is existing or non-existing, would also be falling into the heresies of eternalism (*sassata*) or annihilationism (*uccheda*). Some scholars wrongly interpret it as 'annihilation'. As *Nibbana* was a transcendental (*uttara*), indescribable state, so there was hardly any school of Buddhism which favoured the view of 'annihilation'. So it pretends, that the opinion of scholars who supported 'annihilation' do not rest on very sure foundation. A few psalms of the *Udana* explains *Nibbana* as beatitude.

Secondly, to remove the ambiguity that consciousness (*Vinnana*) continues to exist in *Nibbana*, there is a passage occurring in the *Nibbanasutta* of the *Udana*³, which runs as follows :—

"Atthi, bhikkhave, tad ayatanam yatha n'eva pathavi na apo na tejo na vayo na akasanancayatana na vinnananancayatana na akincannayatana na n'evassana - nasannayatana na nayo loka na paraloka na ubho candimasuriya, tad aham, bhikkhave, n'eva agatim vadami na gatim na thitim na cutim na upapattim, appatittham apavattam anarammanam eva tam es'eva'anto dukkhassa ti".

"O bhikkhus, there is that space (*ayatanam*) where do not exist earth, water, fire and air; nor spheres of infinite space of infinite consciousness, of desinelessness and of neither consciousness nor non-consciousness; neither this world nor next world, nor next world, nor sun and moon, that, I say, is the end of suffering, (i.e. *Nibbanadhatu*), in which there is no coming or going, no continuity, no decay and no origin; it is supportless, free from rebirth, and basisless."

The impartial decision to which we can arrive from this extract that *Nibbana* is not infinite consciousness (*ananatavinnana*) but that it is something transcendental, in which nothing of the phenomena has any place. By the use of the verb "atthi", it shows that *Nibbana* is an ens or entity and not a non-ens i.e., non-entity.

It is our felicity that there lies a distinguished occurrence in the *Suttanipata*,⁴ one of the gems of the *Khuddakanikaya*, another reliable

source to enrich the idea of *Udana*, about non-existence of consciousness (*vinnaṇa*) in *Nibbana* :

"Acci yatha vatavegena khitto

attham palati na upeti samkham

evam muni nainakaya vimutto

attham paleti na upeti samkham.

Atthamgatassa na pamanam atthi

yena nam vajju tam tassa natthi

Sabbesu dhammesu samuhatesu

samubhata vadapatha pi sabbe ti."

"Just as the flame of a lamp struck by a gust of wind disappears and cannot be traced, so also does a perfect saint, freed from name and form, disappears without leaving any trace."

'That which disappears is immeasurable, i.e., infinite and hence there are no words by which it can be spoken of. As it is bereft of all *dhammas*, it goes beyond the range of conventional language.'

In this particular stanza, it has been made clear that the constituted 'consciousness' of a perfect *Arhat* disappears without leaving any trace like the flame of a lamp extinguished by a gust of wind, and that nothing can be predicated of the unconstituted *parinibbana* state of an *Arhat*.

The *Suttanipata* further upholds the view that it (*Nibbana*) is a peerless island which possesses nothing, grasps at nothing, and which is the demolisher of decay and death ('*Akincanaim anadanain etain dipain anapahain, nibbanain iti nain brumi janamaccu parikkhayain.*'). The world is bound by amusement, and by giving up thirst (*tanha*) for wordly objects, one can arrive at the stage of final goal or supreme end, i.e., *Nibbana*.

Nibbana is termed a *dhatu* or *pada*. The term *dhatu* means that which upholds a being; it is an ens or entity, defined as immortality, haven of peace, non-residing place, other shore, island, etc. (*amatapadam, santipadam, accuta-thanam, param, dipam* etc.) All these terms signify that *Nibbanadhatu* is an ens, where disappears the constituted being after emancipation. In the *Itivuttaka*,⁵ occurs the following line :

"*Atthi ajatam abhutam akatam asankhatain tasma jatassa bhutassa katassa sankhatassa nissaranam pannayatiti*".

"There exists the unborn, unoriginated, uncreated, unconstituted, hence, there is the possibility of emancipation (literally exist) of the born, originated, made, constituted."

In order to add lustre to *Nibbana*, our topic of discussion, we now turn to *Parinibbana*. *Parinibbana* is the same term as *Nibbana* or *Moksha*, meaning final liberation that comes to pass on the complete waning out or exhaustion of the accumulated strength or force of *Kamma*. To say that the Buddha attained *Parinibbana* is the same as to say in ordinary language that he expired.

Both in the *Ratanasutta* of the *Khuddakapatha* and *Dhaniyasutta* of the *Suttanipata* the disciples of the Buddha who experience or accomplish the zeal of *Nibbana* are praised as personages who 'expire like a burning lamp (on the exhaustion of oil and wick)'. Whilst they live, they live enjoying the bliss of peace obtained without having to pay any price for it.

Thus the Buddhist description of *Parinibbana* leaves no room for the popular belief in the possibility of resurrection of the bodily form, or even the spiritual form, of a saint. It is nevertheless a total eradication of *personality*, even if that personality is made up of pure consciousness. Such is, in brief, the Buddhist description of *Parinibbana*, which is the natural end of life of those gifted men who realize *Nibbana* in their present conscious existence.

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2. Ibid.
3. Sankrityayana, R., ed., *Udana*, p.83.
4. Fausboll, V., ed., *Suttanipata*, pp. 206—207.
5. Sankrityayana, R., ed., *Itivuttaka*, p.37.

STELLA KRAMRISCH

Professor Stella Kramrisch, the luminous exponent of Indian Art, breathed her last on Tuesday, August 31, 1993 at her residence in Philadelphia, U.S.A. She was in her ninety-seventh year. She was an extra-ordinary personality and her passing away may be said to mark the end of an era in the study of South-Asian Art.

Born in Mikulov in Austria on May 29, 1896, Stella Kramrisch began her studies of Indian art at an young age. She delivered her doctoral dissertation entitled "*Untersuchungen Zum Wesen der fruhbuddhistischen Bildnerai Indiens*" to the University of Vienna in 1921. The dissertation contained an interesting analysis of the component elements of art at Bharhut and Sanchi belonging to centuries immediately before the Christian era.

She chose only one career in her life—that of an educator and interpreter of Indian art, a sphere in which she stands without a peer even to-day. The range and extent of her research on the art streams of the subcontinent as displayed in the vast output of her publications is truly awe-inspiring. She wrote both in German and English. Her mother tongue was German and it has often been claimed that she expressed herself more lucidly in the continental language, but it is her English works which are read and used more widely and brought her recognition from all parts of the globe.

Her first article in India appeared in *Rupam* in 1921 under the title of "*The Representation of Nature in Early Buddhist Sculpture (Bharhut and Sanchi)*". In this essay she marvels at the aim of the early Indian sculptor to present nature in its pristine glory as a living force that tends and controls the physical world. She joined the Department of Ancient Indian History and Culture in Calcutta University as a lecturer in 1923 and remained attached to it for the next twenty-seven years. Besides teaching in the University, she also opened a rich mine of activity in the metropolis of Bengal. She co-edited the *Journal of the Indian Society of Oriental Art* with the celebrated artist, Abanindra Nath Tagore from 1933 to 1950 and helped in founding in 1937 the Asutosh Museum of Indian Art, Calcutta University, as the nodal point of emerging interest in Indian Art. Calcutta University bestowed on her the distinction of University Professor in 1944.

Kramrisch blossomed out into a full-fledged art historian in Calcutta University. In Vienna she received training in comparative art that had had the effect of widening her vision and expanding the orbit of her aesthetic interest. The exercise not only equipped her to take Indian art in its face value, but also enabled her to grasp the creative process underlying it in all its ramification. In Calcutta her favourite haunt was the Indian Museum, the enormously rich collection of which, comprising artifacts from all periods of Indian history, opened a new vista of light to her consciousness. She was able to meet her academic needs from the particular intellectual environment in Calcutta University. She came into direct contact with educationists, practising artists, Sanskritists, archaeologists and idealists like Asutosh Mookherjee, Abanindra Nath Tagore, Bidhusekhar Sastri, D.R. Bhandarkar, Aksay Kumar Maitra and others and taxed her industry and skill to reap a bountiful harvest of ideas from their association.

The interaction with these academic spokesmen provided her with a point of departure and guidance to get across expanses of the mind through a course of investigation which was still largely uncharted. The earlier authorities were keen on estimating the value of Indian's cultural products as documents of history, archaeology or iconography. Another group of scholars emphasised, besides historical influences, the philosophical content of her art idiom. Kramrisch devised a new approach, - that of an art critic to appreciate the creative genius of India's craftsmen. She elaborated her method before her pupils in Visvabharati University, Santiniketan, her first halt in this country. She prescribed that a work of art of Indian origin should be examined in two stages. First, a glance from the front would allow one to identify the subject. Next, it should be viewed from all sides and by turning it upside down. The procedure, she felt, would help the connoisseur to gain insight into the design elements and artistry of the created form.

The thirties and the forties were doubtless the most fruitful years in Kramrisch's life. It was during this phase that she produced her most serious research works which included, among others, "Indian Sculpture" (1933), "*A Survey of Painting in the Deccan*" (1937), a brilliant essay on "*Indian Terracottas*" (1939) and "*The Hindu Temple*" (1946). The first work, a masterpiece, embraces a vast period of sculptural activity in the Indian subcontinent from ca. third millennium B.C. to the nineteenth century. However, as is the characteristic of the scholar, it does not present a descriptive treatment of the subject, but rather takes the sculptural output as a whole and traces the process of its artistic evolution in terms of time and space. Kramrisch observes that the greatest achievement of Indian art is that it has been able to preserve its Indianness through the various vicissitudes of history-a feature that distinguishes it from others of its kind in world art.

The second book contains an elaborate analysis of the cave paintings in the Deccan during the classical period of Indian history. The ingenuity shown by the mural painters at Ajanta and Badami to create an illusion of depth in their compositions attracted the scholar most. The indigenous artists depicted their figures both at eye-level and from above and also used the hierarchical perspective to place their subjects in order of their importance. Kramrisch has termed this method as multiple perspective. Her explanation has led to a new understanding and fresh evaluation of the genius of the Ajanta painter among the contemporary art historians.

She was fascinated by the great number and diversity of terracotta finds unearthed at different archaeological sites of north India. She initiated the systematic study of the material and classified them on the basis of their manufacturing technique into timeless and timebound varieties. The former type is represented by hand-modelled terracotta figurines which are to be found in all ages. The second category or historical terracottas are those which are derived from moulds and bear traits conditioned by changing patterns in popular taste in different epochs of history. Kramrisch has offered a basic criterion of the grouping of the vast mass of Indian terracottas available at the moment. It is now left with the active researchers in art and archaeology to do justice on them by a fuller treatment of their art.

Stella Kramrisch treats of the Hindu temple as a place of pilgrimage and herself as a worshipper. The sacred precinct, she maintains, is equivalent to the cosmos and the various parts of its structure are limbs of the sacrificial body of the *Vastupurusa*, the manifest form of the highest principle. The devotee enters into the temple with his body, mind and speech concentrated on the supreme Being and with the sole object of being united with Him. She had drawn much from the immense resources in Sanskrit literature. A study of the geomatric design of the sacrificial altar described in the *Satapatha Brahmana*; strongly influenced her view on the civilisational and philosophical aspects of the Hindu temple architecture. In Calcutta she familiarised herself with various indigenous treatises on arts and crafts. She valued the body of knowledge preserved in the *silpa* texts and published summary translations in English of the relevant portions in the *Visnudharmottara-purana* and the *Isana-Siva-Gurudeva-paddhati* bearing on painting and architecture in several journals. The Hindu Temple was based essentially on data supplied by a number of *silpa*-texts like the *Manasara*, *Samarangana-sutradhara* and *Isana-Siva-Gurudevaddhati*. In fact, Kramrisch had always been assiduous in her search into the original source materials that helped her in her attempt at correlating the actual art objects with the literary tradition of the country. Her labours bore fruit and her eminent status as an authority on Indian art rests in no small measure on her record of research in the field.

Kramrisch has expanded the horizon of art historical studies in India to a considerable extent by bringing popular art and also the young Indian art within the spectrum of her interest. In several articles on "*Kantha*" she declared her unreserved admiration for the creative sensibilities of Indian womenfolk. She was optimistic about the future of the modern art movement in India. She, however, insisted that the new generation of Indian artists would do better if they responded to their own intuition and personality to create art forms and usages and did not imitate visualisations, designs and compositions from an alien source.

Kramrisch migrated to the U. S. A. in 1950 and joined the University of Pennsylvania, Philadelphia, as Professor of South Asian Art. She held this position until 1969. In 1954 she became Curator of the Indian Section in the Philadelphia Museum of Art with which she remained attached to the last. She also taught as Professor of Indian Art at the Institute of Art in New York during 1969-82. Under the aegis of the Philadelphia Museum of Art, she organised a series of exhibitions that exemplify her profound love and depth of understanding of Indian art. Among the shows produced by her, the following deserve special mention : "*The Art of Nepal and Tibet*" (1960), "*Unknown India : Ritual Art in Tribe and Village*" (1968), and "*Himalayan Art 700 - 1900*" (1978). Her last major exhibition was "*Manifestations of Siva*" held in 1981. It was accompanied by the publication of her work "*The Presence of Siva*", her last great gift to the world of culture. The uniqueness of the tome is that it makes visible the enormous sweep of the scholar's perception of Indian symbology.

Kramrisch was one among the scholars whom Asutosh Mookherjee united together to establish the Fine Arts as an important subject of post-graduate studies in Calcutta University. She set a new standard of art education before her audience by giving equal emphasis on physical elements of style and implication of a work of art. The department of Ancient Indian History and Culture, Calcutta, has obtained from the gifted art historian a rich legacy of expertise which is woven into the teaching and research on Fine Arts in the centre. The continuing presence of Stella Kramrisch casts a warm glow of intellectual influence on the mind and spirit of the faculty in the Department.

Niranjan Goswami

D.P. GHOSH

Professor Deva Prasad Ghosh, a brilliant product of the Department of Ancient Indian History & Culture of the University of Calcutta, well-known art-historian and museologist, will ever be remembered for one achievement — setting up of the Asutosh Museum of Indian Art at the University of Calcutta, the first University museum in India. His contributions in the domain of art history, museology and archaeology are immense and he had earned many laurels in his life time. But this action alone had ensured the permanent imprint of his name in the history of museum movement in India.

Born in a traditional Brahmo family of North Calcutta on the 13th February, 1903, he had his early education at Hare School, Calcutta. He graduated with a first class honours in Economics from the Presidency College, Calcutta, in 1923. His father being a leading lawyer of the Calcutta High Court, insisted on his son joining the law course. He, instead, preferred admission into the M.A. course in Ancient Indian History & Culture in Group 1B (Fine Arts). He stood first class first in the M.A. examination in 1925. He got the Premchand Raychand Scholarship in 1927, working on "Orissan Arts and Crafts". He was awarded the Mauat Medal in 1929 and the Griffith Prize in 1933 from the University of Calcutta for his sustained contributions to Indian art history.

Under the inspiration of his teacher, Professor D.R. Bhandarkar, and active patronage of Dr. Shyamasundar Mukherjee, illustrious son of Sir Asutosh Mukherjee and Vice-Chancellor of the University of Calcutta, Professor Ghosh founded the Asutosh Museum of Indian Art in a dark corner of the historic Senate House with only five antiquarian objects in 1937 and became the first Curator of the Museum. The museum's collections, by the time he retired in 1968, swelled nearly to twenty seven thousand antiquarian remains covering Bengal, Bihar, and Orissa, ranging in date from the early historic to the late medieval period. Apart from collecting hierarchical antiquities like sculptures in stone (primarily of the Pala and Sena periods), bronzes, wooden sculptures, terracotta figurines and temple plaques, Nepalese bronzes, Tibetan Tankas, Textiles, Indian Miniature Paintings belonging to the Mughal, Rajput, Pahari and local schools, coins, seals and sealings and painted manuscript covers, Professor Ghosh showed his remarkable far sight and ingenuity by collecting rich varieties of folk art and craft objects of Bengal, Orissa and Bihar, like

pats (scroll paintings), painted *saras* (clay lids), *kanthas* (embroidered quilts), folk dolls and toys and ritual objects. In order to enrich the growing collection of the Museum, he secured permission from the Archaeological Survey of India to excavate Bangarh (Dist. Dinajpur, W.Bengal) between 1937-41, this being the first excavation by a University in India. This was soon followed by a series of explorations and excavations at various sites in W.Bengal by a band of enthusiastic and devoted students and workers under his active guidance.

Professor Ghosh equally showed his talent in organizational activities. In order to impart both theoretical and practical training in arts and crafts to school teachers as well as the practising artists, he introduced the "Art Appreciation Course" at the Asutosh Museum in 1941. One of the greatest achievements of Professor Ghosh was the introduction of the Diploma Course in Museology in 1959 at the University of Calcutta, the second of its kind in India after the M.S. University of Baroda. Besides teaching Fine Arts in the Department of Ancient Indian History & Culture, he combined the posts of Curator of the Asutosh Museum and Head of the Department of Museology, Calcutta University. He held both the posts till his retirement in 1968.

The fame of the rich repository of the museum spread abroad and created considerable interest among scholars of Indian studies. Its materials were utilized by them in their various writings. The contribution of Professor Ghosh could better be assessed from a letter dated the 25th June, 1975, written by Professor Stella Kramrisch, doyen of Indian art history, who happened to be his teacher at the University of Calcutta. The letter was written while Prof. Kramrisch was approached to contribute an article for the proposed felicitation volume of Prof. Ghosh. She writes, " I well remember the days when Deva Prasad Ghosh was one of my students at the University of Calcutta. At that time, impressed by the extraordinary wealth of living art in Bengal in particular but also in the whole of rural India, I suggested to Asutosh Mukherjee that these up to then completely ignored works of art be collected in the Museum. My students came mainly from village homes and I hoped they themselves could be organized to collect these works of art. The then Vice-Chancellor, Asutosh Mukherjee, of the University of Calcutta, to whom I submitted my idea asked me to draw up the plan and program for the Museum which I did in detail. Fortunately one of the students, namely Deva Prasad Ghosh, by his love for Indian Art was considered eminently suitable to organise this work and that is how the Asutosh Museum began. I just wanted to put this on record. Deva Prasad Ghosh fulfilled our expectations, he was devoted to his work all the while, successful in finding objects and workers. His enthusiasm spread amongst his own students. Later on, the Museum conducted its own excavations, these had not been foreseen in my original

plan. I am glad to have this opportunity of acknowledging the work done by Deva Prasad Ghosh. I only regret that other Universities or Museums in India did not follow the example set up by him at the University of Calcutta."

Professor Ghosh served as expert member in many national committees like Chairman, Art Purchase Committee, National Museum, New Delhi; member, Board of Editors, Lalit Kala; Non Official expert, Advisory Committee, Export Control Committee of the Archaeological Survey of India, Member of the Central Advisory Board of Museums, Govt. of India; Regional Handicrafts Board, Govt. of India, etc.

He was made a Fellow of the Asiatic Society, Calcutta. He contributed nearly fifty research papers to various Indian and foreign journals of repute, besides writing several books that include *Studies in Museum and Museology in India* (1968), *Kama Ratna* (1972), *Tribal Metalware of Eastern India* (1975), *Medieval School of Eastern India* (1982).

Samir Kumar Mukherjee

BOOK REVIEW

ENCYCLOPAEDIA OF INDIAN TEMPLE ARCHITECTURE- NORTH INDIA : PERIOD OF EARLY MATURITY, C.A.D. 700- 900

Edited by Michael W. Meister and M.A. Dhaky, Vol. II, Part 2, Text Volume, XX + 467 pages, 18 maps and 217 figures; Plates Volume, 977 plates, Delhi, 1991, Price Rs. 1500.00

A worthy successor of the previous volume on north Indian temples, the present book deals, in extensive details, with the religious shrines that represent the transition from the phase of experiments to that of the evolved form in its various regional manifestations. Unlike other volumes in the same series, the number of contributors to it are limited to only five. Of its twentyone chapters, seven each have been written by Krishna Deva and Michael W. Meister, five by M.A. Dhaky, one by Debala Mitra and one jointly by M.A.Dhaky and M.P.Vora. These well-known authorities on early historical architecture of India have placed before the scholarly world a very clear picture of the initial stages in the regional ramifications of the *nagara* style. Besides, temples, not belonging to the *nagara* order but supposedly built during this period, have also been covered. The treatment of the subject, in every chapter, follows a set pattern. It begins with a Historical Introduction which is followed by the identification of Architectural Features and an account of the individual temples of the given area with a suggestion of their respective dates. At the end of each chapter is a list of reference works. Where necessary, the text is accompanied by maps and line drawings. Architectural styles have been distinguished in terms of ruling houses in the areas concerned. The Text part of the book ends with a Reference Glossary and a Sites and Temple Index. The accompanying Plates Volume contains photographic illustrations of almost all the temples discussed.

The vastness of the area surveyed and the care taken for minute details are amazing. The contributors have reconstructed the history of north Indian temple architecture of the period under review confining their description of temples to an objective analysis rather than to an interpretative speculation. Dating of the temples are made on the basis of such analyses. One may not agree with everything the authors have said but that is where the book opens scope for further investigation in this field of study. However, a tome of such a magnitude should have section drawings at least of some representative monuments to give one an insight into the similarity or otherwise in the interior construction of

temples belonging to different regions and periods. Metric analysis is another area which has generally been avoided. The Saiva temple complex at Joshimath (Chamoli District, U.P.) does not find any notice for a comparative study with the strikingly similar Madhukesvara at Mukhalingam (Srikakulam District, Andhra Pradesh). The Kapilesvara temple at Simalti (Almora District, U.P.) should not have been ignored in the section on Hill Dynasties. The coverage on Osian temples remains incomplete in the absence of any mention of a partially buried and probably the only *triratha* temple at the site. Barakar Temple No. 4 seems to have been constructed during a period that is beyond the purview of the present volume. The chapter on the Bhauma-Karas include such temples like the Kosalesvara at Baidyanath and the Kapilesvara at Charda which are definitely results of Somavamsi intrusion in Western Orissa. The *panchayatana* Kosalesvara at Subda (Balangir District, Orissa), an early Somavamsi temple in this tract, has been left out of discussion. One is not sure whether most of the temples discussed in this section are datable prior to 900 A.D. and many temples, particularly of Andhra Pradesh, should be assigned to the Bhauma-Karas rather than to the Eastern Gangas. These and many other minor points, where disagreement with the contributors may arise, are of little consequence in an overall assessment of the monumental work produced through an obviously prolonged research and sustained labour. No word is enough to acclaim the achievement of all concerned in bringing out the volume so rich in its contents. The editors have done their job with meticulous care and flawless precision. The printing and get up are in keeping with the best tradition of the American Institute of Indian Studies.

D.R. Das

JHEWARI BRONZE BUDDHAS : A STUDY IN HISTORY AND STYLE

by Asok K. Bhattacharya, IX + 26 pages and 40 plates, Calcutta, 1989, Price. 100.00

The slim monograph is the result of the author's endeavour to 'underscore the aesthetic significance of the Jhewari Buddhas' in the history of Indian metal sculpture. It begins with an account of the Discovery and Historical Background of the bronzes found at Jhewari (Chittagong District, Bangladesh). In this chapter, the author says how a hoard of 61 bronze Buddha images were unearthed by a chance digging and thereafter distributed among museums in India. It is followed by a description of the history and geography of the period and area concerned. In the second

chapter on East Indian Context : Trends in Styles, an attempt has been made to analyse the stylistic features of the Jhewari Buddhas. This analysis leads the author to classify them into three broad types, viz. the classical Sarnath type, the autochthonous type and the Jhewari type. Sculptures of the first type, echoing Sarnath classicism, deviate from the Gupta tradition in having a 'comparatively more masculine and stoic' body (p. 10), nearly conical crown and a mundane facial expression. Buddhas of the autochthonous idiom follow a popular trend which is quite distinct from the post-classical experiences of Bodhgaya and Nalanda (p. 12). Its principal features include 'a weird treatment of the face with protruding, and even bulging eyes, raised eye brows, lips turned outward, prominent nipples... and a muddy finish of the entire form' (p. 13). According to the author, the less formidable grip of the hieratic principles probably allowed the popular art tradition of south-east Bengal to guide the fashioning of these Buddhist images in tune with the local aesthetic norms. Buddhas of the Jhewari type, a product of an interaction between the classical and local idioms, constitute the most significant group. While suffering from a mannerist treatment, some of them betray subtle enigmatic expression that 'wavers between deep introspection and human expression between sublimity and a moral sentiment' (p. 15). The author asserts that these sculptures stand for the 'most exquisite representations of the Master ever carved or cast anywhere in the world' (p. 14). Not long after reaching its apogee, the Jhewari Buddha type went on a downward path by losing its creative vigour. In the third chapter, entitled The Jhewari Style : Sources and Diffusions, the author tries to show the existence of a long standing contact between Magadha and south-east Bengal through an iconographic and stylistic study of the bronzes of these two regions and assumes that, by an intelligent blending of elements drawn from south Bihar with local features, the Jhewari sculptor could develop a distinct variant or sub-style of the east Indian school. In his search for the diffusion of the style, the author could notice examples of the second type in some Buddhas at Malnamati and Chittagong. Outside Bangladesh, a solitary specimen in Arakan has been taken to have affinities with the Jhewari style. The very short lifespan, probably caused by the invasion of an iconoclastic horde, is said to have prevented the style to diffuse in an wider area.

Working on a not so wellknown group of metal sculptures, the author could discover a local school of much historical and artistic value. The treatment of the subject bears ample evidence of his command over the

history of the art movements in eastern India. To his credit goes the identification of a sub-style in all its essential details. The accompanying plates are in confirmation of what has been stated in the text. The Select Bibliography is a useful addition. The printing and get up of the book are of a high standard.

D.R. Das

ANALYSIS OF REASONINGS IN ARCHAEOLOGY : THE CASE OF GRAECO-BACTRIAN AND INDO-GREEK NUMISMATICS

by Olivier Guillaume and published by Oxford University Press, New Delhi, 1990.

First published in French in 1987, the present work is an English translation prepared by O. Bopearachchi duly authorised by the Editions Recherche sur les Civilisations and its publication has been enabled by the editorial committee of the series *French Studies in South Asian Culture and Society*.

The work is divided into two parts - Part I dealing with the critical examination of numismatic catalogues and the works considered by the author in this part include the following :

(i) A Cunningham, *Coins of Alexander's Successors in the East : Part I : The Greeks of Bactria, Ariana and India*, London, 1884 and Indian Reprint, Indological Book House, Delhi, and Varanasi, 1970; (2) P. Gardner, *The Coins of the Greek and Scythic Kings of Bactria and India in the British Museum*, London, 1886 and Indian Reprint, Sagar Publications, New Delhi, 1971; (3) V.A. Smith, *Coins of Ancient India : Catalogue of the Coins in the Indian Museum*, Calcutta, Vol. I, Oxford, 1906 and Indian Reprint, Indological Book House, Delhi, Varanasi, 1972; (4) R.B. Whitehead, *Catalogue of Coins in the Punjab Museum, Lahore*, Vol. I : *Indo-Greek Coins*, Oxford, 1914 and Indian Reprint, India Academy, Varanasi, 1971; (5) A.N. Lahiri, *Corpus of Indo-Greek Coins*, Poddar Publications, Calcutta, 1965 and (6) M. Mitchiner, *Oriental Coins and their Values : The Ancient and Classical World 600 B.C. - A.D. 650*, Hawkins Publications, London, 1978.

The author has discussed in Chapter 1 of this Part how the different numismatists have defined their respective corpus of coins, in Chapter 2 how they have described the coins and in Chapter 3 their classification of the coins. He has attempted to standardize, as far as practicable, the

series and the individual number when that is given. He has used the word 'series' to indicate the various classes according to which the authors have grouped the coins of a king (Smith and Whitehead use the word 'type', while though no special term has been used by Cunningham, Gardner and Lahiri to designate the classes, they have distinctly differentiated them by a suitable numbering).

Part II of the work devotes to a study of the historical reconstructions and the works under consideration are W.W.Tarn's *The Greeks in Bactria and India*, 2nd revised edition, Cambridge, 1951 and an Indian Reprint, Munshiram Manoharlal, New Delhi, 1980 and A.K. Narain's *The Indo-Greeks*, Oxford, 1957 and an Indian Reprint, Delhi, 1980. This part has two chapters, Chapter 4 containing discussion on Preliminary Definitions and Chapter 5 Inventory of Numismatical Reasonings after which one finds the author's Conclusion in which he states 'as things stand at present, any progress in BIG historiography seems to us to be inevitably linked to the establishment of typologies on the basis of the variables used by catalogues in their descriptions of coins. It is a safe bet that a fair number of hypotheses put forward by the historians will then collapse.'

Guillaume has himself stated in his 'Introduction' that his aim is to consider studies in Graeco-Bactrian numismatics from the methodological viewpoint and not with respect to their substance and the importance of a case-study like this no doubt appears at times questionable, but, as J.C.Gardin rightly observes, 'one would have to be somewhat blind, and decided to remain so, not to perceive through this example a number of issues that are quite common in archaeology and that call for the same kind of thought, or better still action, in the realm of methodology'.

Turning to historical reconstructions through case studies like the present one, Guillaume's effort seems directed toward finding out certain rules helpful for strengthening the association of archaeological observations with the historical hypotheses drawn from them apparently revealing thereby manifestation of the concerns of many present day archaeology-interpreters like Lewis Binford, Alain Gallay and some others.

Exhibiting a clear understanding of the various approaches of earlier scholars and rare thoroughness in handling the material available, Guillaume has presented us with a work indeed most welcome and very likely to inspire similar case studies. One may not, however, agree with the author on certain points such as overstriking indicates (p.73) contemporaneity or 'the more there are monograms in common, the more plausible is the link' (p. 101) between kings particularly when he himself admits (p. 103) that 'an overall study of monograms remains a priority in BIG historiography'.

The get-up of the book is excellent and its price (Rs. 125/-) reasonable. A mention of the very learned "Foreword" by J.C. Gardin in the author's "Acknowledgements", an explanation of excluding in the "Bibliography" the 8 very important works considered by the author and mentioned on pp. 11 and 12 of the book and an Index, so very necessary for a work like the present one, are things wanting in the work and worth-remembering at the time of its revision for a second edition.

Samaresh Bandyopadhyay

PRACHINA BHARATERA ARTHANAITIKA ITI HASERA SANDHANE (in Bengali)

by Ranbir Chakravarti Calcutta, 1398 B.S. 248 (including Bibliography and Index); Price Rs. 45.00

Ananda Publishers Limited earns our gratitude by publishing and by promising to publish a series of books on history in Bengali by eminent historians. The book under review is one of that series.

It is divided into nine chapters excluding an introduction and other conventional sections like bibliography, index etc.

In the "Introduction" the author has made a historical analysis of earlier works on the economic history of India and then has given his own approach to the study.

The book under review covers the period ranging between 2300 B.C. to 1200 A.D. It starts with the period of first urbanisation, that is of the Harappan culture. Then it focuses on the economic condition of India between 1500 B.C. to 1000 B.C. Archaeologists include this phase within the Chalcolithic period, Chakravarti calls it the Period of Pastoral Economy, obviously because of its emphasis on information drawn from the Vedic literature. The chapter discussed under the caption "Establishment of Agrarian Economy (1000 B.C. to 600 B.C.)" deals with the excavated materials of the Chalcolithic sites, problems of iron and its role in the expansion of agrarian economy, along with information derived from literary sources. But one feels that the section dealing with archaeological sites should have been more elaborate because the excavated materials are our major source for reconstructing the history of this phase. The surplus in agrarian production led to the growth of cities and city states. From these city states of the sixth century B.C. ultimately developed the Mauryan empire with its state controlled economic programme. The Mauryan empire declined by 175 B.C. but this did not lead to any economic crisis and in fact the period ranging between 175 B.C. to 300 A.D. was

one of "Expansion of Agrarian and Commercial Economy". Chakravarti admits that external trade declined in the period ranging between 300 to 650 A.D. (p. 174), but there was further expansion in agrarian economy and the grants of Agraharas facilitated this process (p. 165). The Gupta period definitely was not the "Golden Age" of Indian history, but whether or not the succeeding phase (650 - 1200 A.D.) can be regarded as the period of "Indian Feudalism" is a debatable question. Chakravarti has dealt at length with various theories for and against this proposition and has concluded that the term is not applicable in Indian context. Historical debate is always healthy if our aim is really to search and search again.

The greatest merit of the book lies in its language. The lucid Bengali used in the book indicates that the author has complete grasp over the subject and so the book does not appear as collation of facts and translation of views expressed by different scholars on Indian economic history. The book is enjoyable to the scholars as well as to the students.

Chitrarekha Gupta

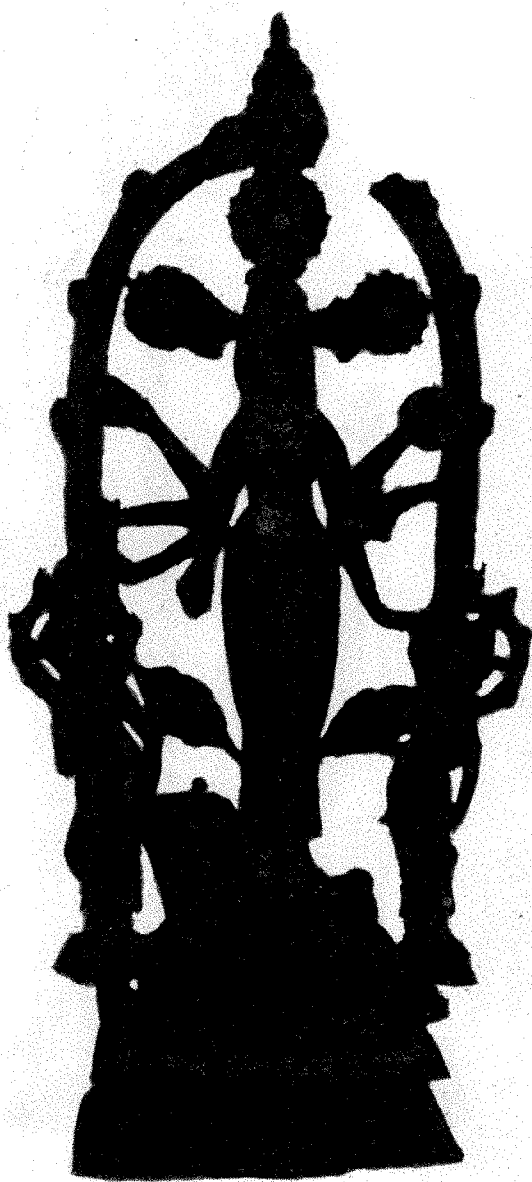


Fig. 1

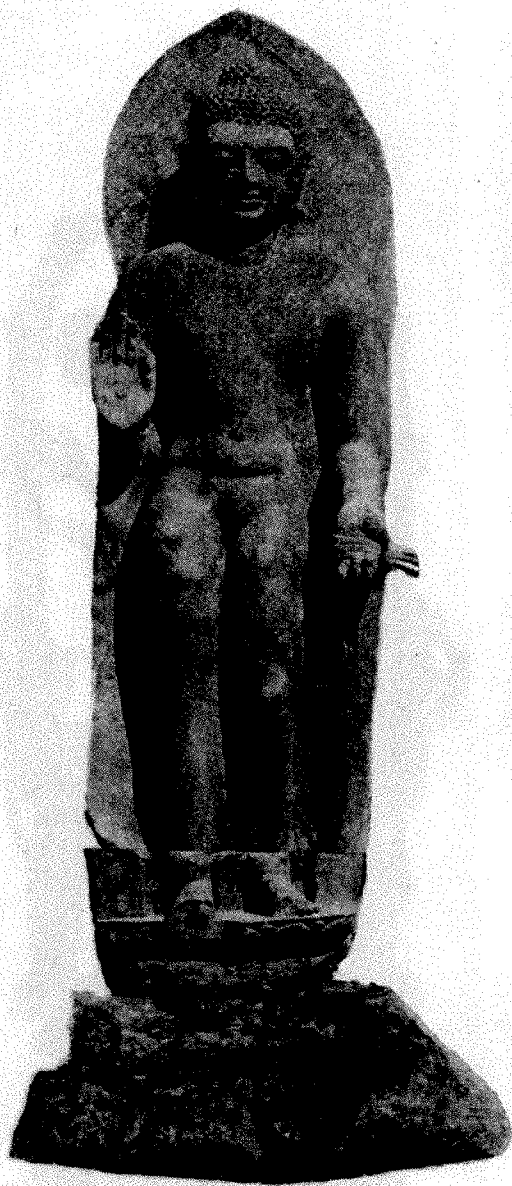


Fig. 2



Fig. 3

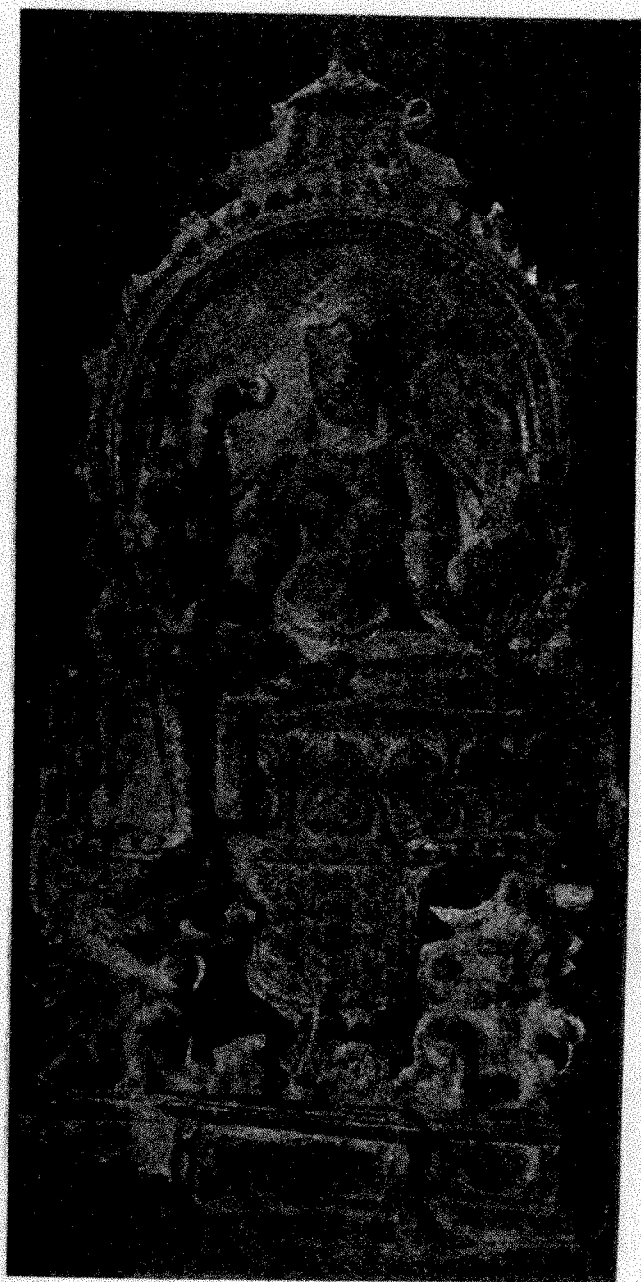


Fig. 4

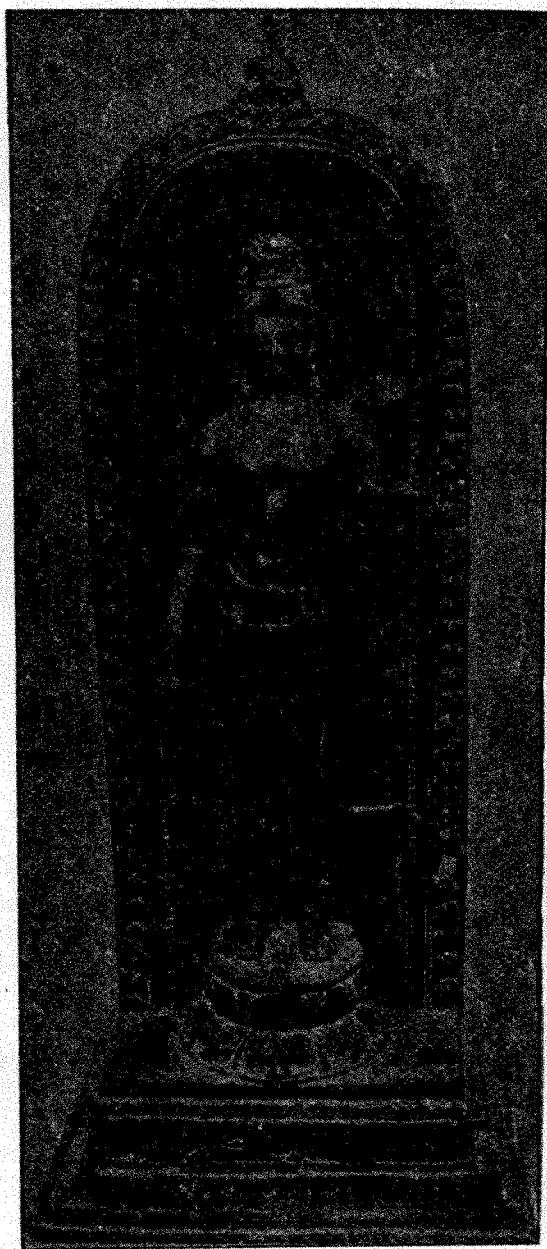


Fig. 5



Fig. 6

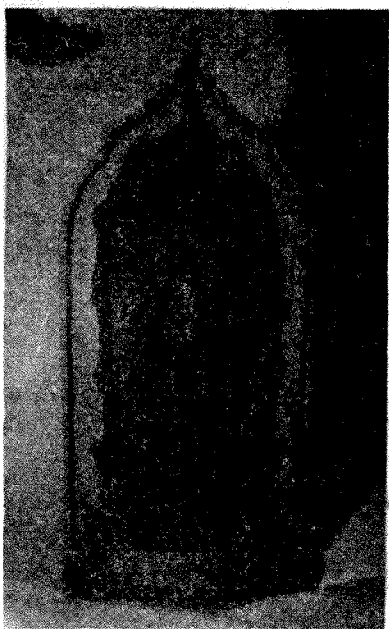


Fig. 7



Fig. 8



Fig. 9



Fig. 10

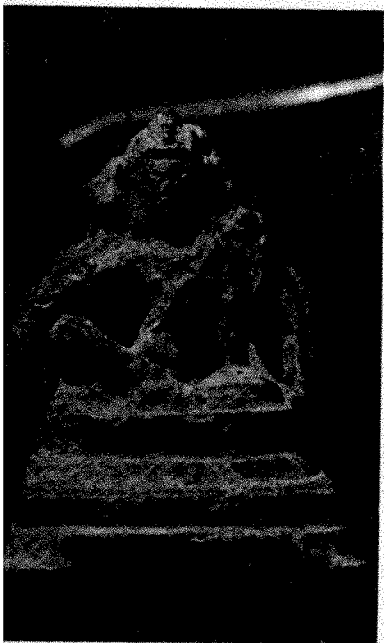


Fig. 11



Fig. 12



Fig. 13



Fig. 14



Fig. 15



Fig. 17



Fig. 18



Fig. 19



Fig. 20

Art of South Eastern Bengal

1. Sarvani, Deulvadi, After Bhattasali.
2. Buddha, Rupban Mura, Mainamati, Courtesy Prof. B. N. Mukherjee.
3. Buddhist Plaque, Kotila Mura, Mainamati, After Asher.
4. Sitapatra, Tippera, After Bhattasali.
5. Lokanatha, Sylhet, After Bhattasali.
6. Plummet. Surma Valley, Courtesy British Museum, London.
7. Avalokitesvara. Pilak, Courtesy Tripura Museum, Agartala.
8. Visnu. Tulsipahar. Courtesy Tripura Museum, Agartala.
9. Buddha. Pilak. Courtesy Tripura Museum, Agartala.
10. Avalokitesvara and Tara. Pilak. Courtesy Tripura Museum, Agartala.
11. Bodhisattava. Pilak. Courtesy Tripura Museum, Agartala.
12. Votive Stupa. Tripura. Courtesy Jahar Acharjee, Agartala.
13. Cunda. Kahalipara. Courtesy Assam State Museum, Guwahati.
14. Bodhisattva, Tara. Courtesy British Museum, London.
15. Buddha. Pilak. Courtesy Tripura State Museum, Agartala.
17. Garuda. Bhuvan Pahar. Courtesy NEHU, History Department.
18. Folkish Figures. Bhuvan Pahar. Courtesy Dr. Sujit Chaudhury, Karimganj. Assam.
19. Jina. Comilla. Courtesy Asutosh Museum of India Art, University of Calcutta.

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